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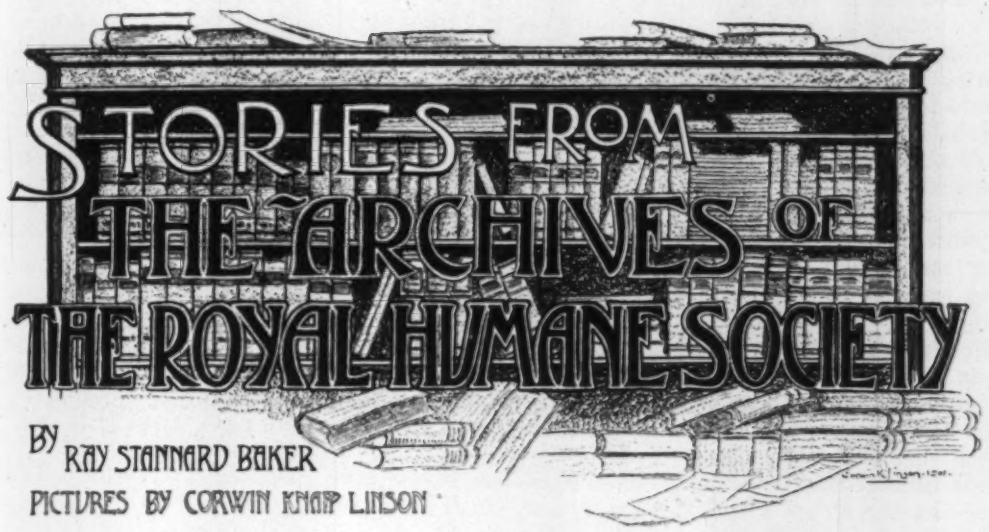

STORIES FROM THE ARCHIVES OF THE ROYAL HUMANE SOCIETY

BY RAY STANNARD BAKER

PICTURES BY CORWIN KNAPP LINSON

IT IS not so surprising that there is heroism in the world as that there is so much of it. In the single year 1899, the Royal Humane Society rewarded no fewer than 756 persons for rescuing life from drowning and suffocation. This was only in one department, as one may say, of heroism. Other hundreds of lives were saved from fires by firemen, from street and tramway and railroad accidents by the police, from danger at sea by the life-saving service, to say nothing of the many cases which come under none of these classifications. And then there are the scores of humble heroes who are never heard of beyond the narrow precincts of a neighborhood, and those not braver, but less fortunate, who are the victims of their own heroism, who perish with those whom they go forth to save. For every Nelson who is honored, there are 10,000 unknown heroes, as brave in the true essence of bravery, who are never rewarded, and who do not expect or desire reward. The Royal Humane Society presents its medals only for rescues from drowning and suffocation, and yet in the 125 years of its existence its cases have run far into the thousands, only British subjects, of course, being considered. It is not my purpose to write of the history or the interesting work of the Royal Humane Society, but rather to give an account of a few of the strange and remarkable cases of humble heroism which have recently been brought to its attention.

And first of Brown and Brand. Brown was a football player, a well-knit, muscular fellow, thirty years old, by profession a miner. Brand was a member of the Diamond Fields Horse of South Africa. Both worked in the De Beers mine near Kimberley. On the afternoon of June 5, 1897, there was trouble in the thousand-foot level. Those outside saw shouting, half-naked Kaffirs come plunging out of the mouth of the tunnel. wild with terror. Behind them, creeping in a thick, slow-moving, and yet irresistible mass, flowed a stream of blue mud. No one knows quite the reason, but sometimes a tunnel in the diamond mines strikes

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soft earth, and there follows a rush of mud, the greatest terror of the mines. The mud does not burst outward with explosive violence, as water might do, instantly alarming the entire mine; but, a miner having turned his back, it bulges from the tunnel end, flows outward heavily and silently, and when the miner turns again, it is upon him, ready to swallow him up; and thus it fills the tunnel, a thick, viscid, suffocating mass.

Such was the mud rush of June 5. After the count had been made of those who had escaped from the tunnel, it was found that two Kaffir "boys" were missing. Knowledge as to the place where they worked made it probable that the mud had caught them without warning; but there was still a bare possibility that they had been able to reach the hundred-yard "rise" or "pass"—that is, a room where the tunnel was much enlarged for the passing of trams. Even though the tunnel was filled with mud, here they might yet find air enough to keep them alive for some hours. But the tunnel mouth was already vomiting the thick blue ooze. It was filled from roadway to roof. When the flow stopped—and no one could tell how soon that would be—there was yet a hundred yards of mud to dig away before reaching the rise where the Kaffir "boys" were supposed to be. That would take a long time—so long, that the two miners were given up for lost, without more ado.

But the rush ceased sooner than was expected, and the manager at once set his men to work digging away the mud. All that afternoon, all night, and all the next forenoon they worked steadily without making any noticeable impression. Late in the afternoon, however, the mud began to fall away a little from the roof of the tunnel. It was presumed that the imprisoned Kaffirs were already dead from suffocation, and yet there was one chance in a thousand—the one chance that a hero always takes. This gave Brown and Brand their opportunity. There was now a space of some dozen inches between the tunnel roof and the top of the stream of mud. Brown proposed crawling in; Brand agreed. Their friends urged them not to risk almost certain death for the sake of two black Kaffir boys, for they could not tell at what moment the mud rush would begin again and fill up the tunnel, and they knew how little air there was to breathe, and how probable it was that this little was full of poisonous gases.

But Brown and Brand stepped up, and each with a miner's lamp in his hat crept into the cold blue ooze. The mud was too thick to permit of swimming and too thin to bear their weight, so they were compelled to struggle along in the most toilsome and exhausting manner. In places where the tunnel roof was unusually low, they cleared away the mud with their hands and thrust their heads through. Sometimes the space was so narrow that the mud reached up to their noses, and all the while the air became fouler and fouler. Their lamps went out soon after they entered, and they had no way of relighting them, but crept onward in absolute darkness. From time to time they shouted, and at last, just as they were ready to turn back, for they had become chilled and much exhausted, they heard faint shouted replies. This gave them new heart, and they pushed onward, finally reaching the rise. Here they found the Kaffir boys, who had now been imprisoned upward of twenty-nine hours, in a condition of almost helpless exhaustion. The return, though the mud stream was now a little lower and there was more room to breathe, was terrible beyond description; for they were compelled not only to force their own bodies through the mud, but to drag the two natives after them. Frequently they stopped in the dark to rest, and sometimes, as they relate, they felt that they never could go on again. At last, however, gasping for breath, they saw the light glimmering in from the tunnel mouth, and shortly afterward friends dragged them out. Every part of their bodies was coated thick with mud, their hair was matted with it; but they had saved the lives of the two Kaffirs—white blood for black. One feels that such heroism as this is belittled with rewards, and yet it is satisfactory to know that the deed of Brown and Brand was appreciated. Not only were they rewarded substantially by the mine manager, but both now wear the silver medals of the Royal Humane Society.

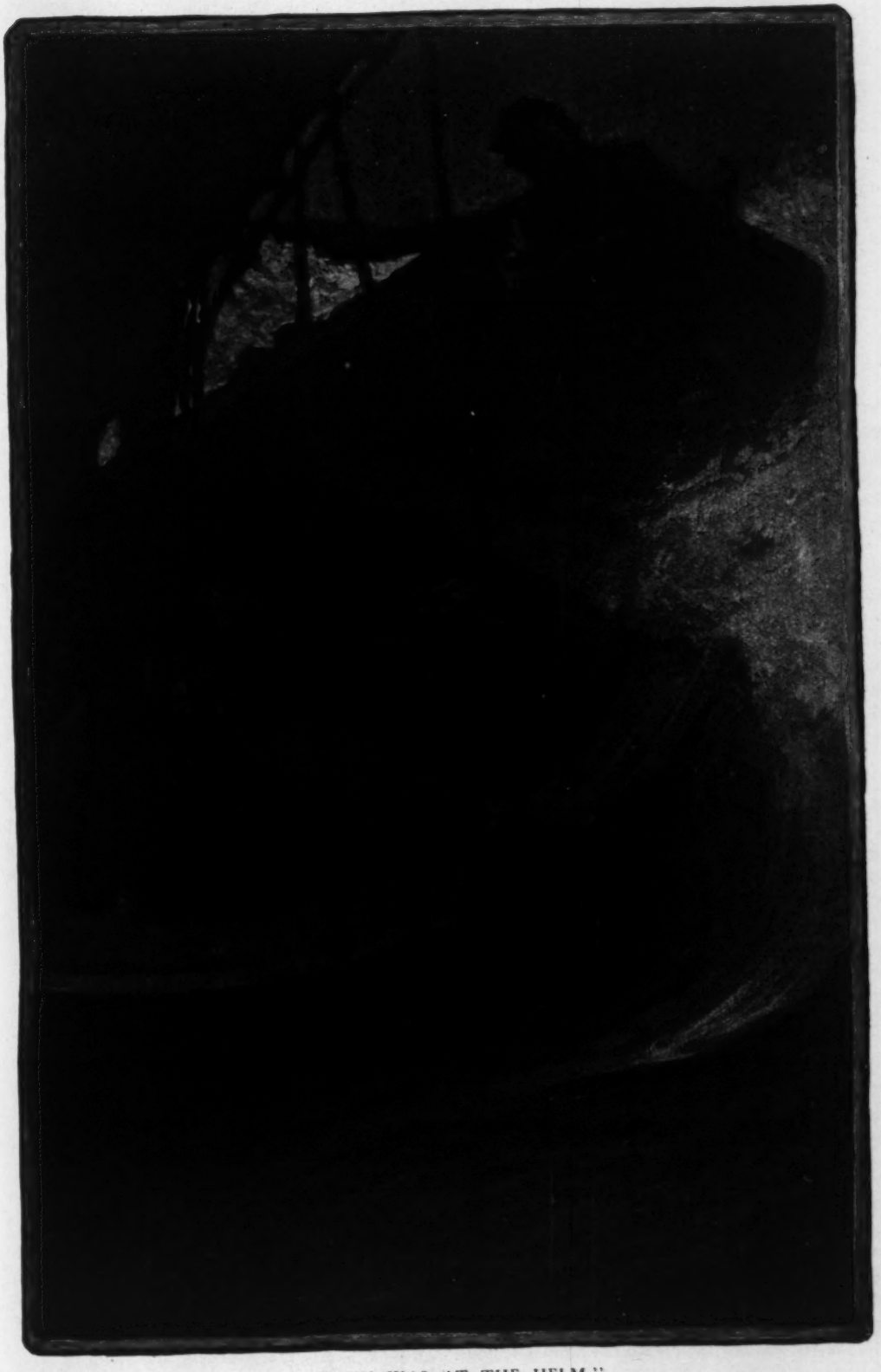
The Society watches with keen eye for brave deeds in every part of the earth or sea where flies his Majesty's flag; but a large majority of the cases are in England, Scotland, and Ireland, and the accounts of them are homeric in their simplicity. A boy falls into the Thames; a man pulls off his coat without a moment's thought and jumps after him; both are rescued. There was the case of the second officer of the steamship "Sultan," bound down from Calcutta to Jeddah. You may find it in Document 28,627; it is told with the dry formality of a log-book report, which locates everything by latitude and longitude. It seems

". . . SAW SHOUTING, HALF-NAKED KAFFIRS COME PLUNGING OUT OF THE MOUTH OF THE TUNNEL, WILD WITH TERROR."

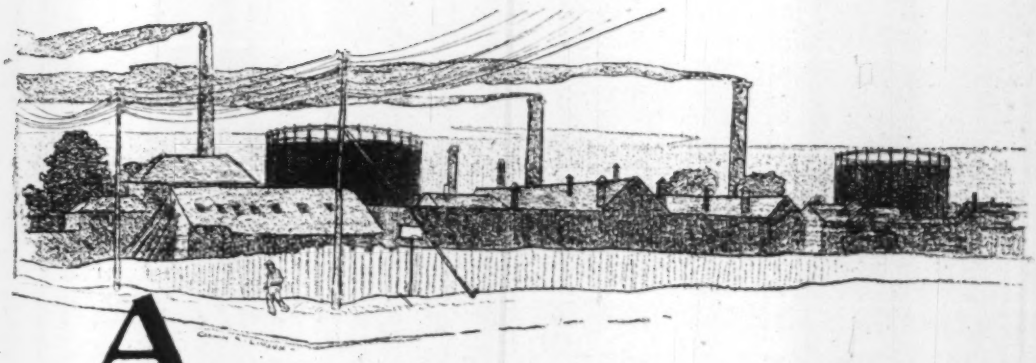
that it was July and hot in the Indian Ocean. A Lascar fireman named Esnolla, rushing up from the hell-hole of heat in the stokers' room to get a breath of fresh air, slipped overboard. There are those to whom a Lascar more or less would be a small matter, especially when an immense sea was running and there were sharks abroad. But they heaved a life-buoy after Esnolla, and the captain brought the "Sultan" sharply around, and gave orders to lower a boat. But watch as he would, the lookout could see no Lascar, for the sea ran too high; nor were they able to lower the boat. However, after wearing the steamer several times, they sighted a black blotch in the water and saw a hand lifted. Collins, the second officer, seized a line and jumped overboard.

Collins was twenty-two years old, and a strong swimmer. He had need for every ounce of his muscle, for he struggled there in the water for over three hours, up and down with the huge waves, finally reaching the Lascar. After making him fast to the rope, Collins gave the signal, and both were drawn up, more dead than alive. And that won a silver medal.

Some of the Society's cases, besides telling a story of heroism, throw an impressive side-light on the strange happenings in little-known corners of the earth, where any day may bring a thrill of adventure. Such is the story of Alfred J. Swann. Among the jungles of Central Africa, where wandering Englishmen come in Stanley helmets to trade celluloid buttons and stove-pipe hats for elephant tusks, there is a little native village called Kota-Kota. It is on the shore of Lake Nyassa, and most of the white men who come there die the first year. But over one hut flies the British flag; and in the doorway, under the flag, Swann sat, days on end, representing the authority of the Queen, and seeing that the elephant tusks were properly traded. One day an Englishman named Johnstone came to Kota-Kota to hunt elephants, and while going out from Swann's village into the jungle an elephant stepped on him. Natives brought Johnstone in and laid him at Swann's door. He was unconscious, with a broken leg and arm. The nearest doctor was sixty miles away, on Lokoma Island in Lake Nyassa. Swann felt Johnstone's heart; it was still beating feebly. Although there was every promise of a dark and stormy night, he succeeded in getting a sailboat, and by hook and crook he manned it with natives. Then he lashed the injured man to a stretcher, fastened him firmly under the seats, and set out. For two hours they made good time; but the wind deepening, they were compelled to shorten sail. As the night advanced, the blacks grew cold and terrified, and lay down under the mats to die. Swann could not even kick them into helpfulness. The sea rapidly grew so wild that he could not make enough sail to run away from it, and the waves washed in over the gunwales and beat over the unconscious man in the bottom. Swann was at the helm, and in order to cover his friend more effectually he must leave his place. After much persuasion and some force, one of the natives was prevailed upon to take the helm. Swann was spreading a piece of canvas over the injured man, when the frightened native allowed the boat to go about a little. Instantly a huge wave came over the quarter and washed him overboard. Swann turned as he heard the helmsman shout, and saw him struggling in the water. Quick as a flash Swann cut the main sheet, and the sail flew out with a bang; then, waiting not an instant, he plunged into the water. It was so dark he could not see the native, but being a strong swimmer he struck out for the spot where he judged he might be. The boat was left to shift for itself, the natives moaning helplessly under the mats. For some moments Swann swam about hopelessly, every moment seeing his only hope of safety, the boat, drifting further away. Then suddenly the native came up almost under him; he seized him by the hair, turned him over, and struck out for the boat. It was a terrible pull back in that high sea, with such a burden, but at last Swann grasped the gunwale. He called for the other natives to come and help, but none would stir. At last, by almost superhuman effort, he succeeded in getting his half-drowned helmsman into the boat and then in following himself. The boat was almost full of water, and it required the hardest work to prevent instant foundering. The next day Swann reached Lokoma Island, having been nearly twenty-four hours on the voyage. Strange as it may seem, Johnstone was still alive, and with good attention he ultimately recovered. Out of Central Africa came the news of this heroic deed, and down into Central Africa went the medal of the Society.



"SWANN WAS AT THE HELM."



A man may grapple with a terror that he knows, with right good will, even though the chances are against him; but it is the unseen terror that tries the soul of fortitude. It was an unseen terror that Perrin and Walker met that day in Wrexham.

Hesketh was assistant manager of the Wrexham gas works. He had come around early one bright October morning—a Sunday morning—to see that the machinery was in working order. They heard him among the purifiers, and Perrin, going out, saw him descending one of the little ladders that led to the chamber beneath one of the oxide-of-iron purifiers. Perrin was a gas-stoker.

Presently Hesketh came up.

"The water seal is forced," he said hurriedly, and a moment later he returned with a plug. Perrin advised him not to go into the gas chamber; so did Walker, who had just then arrived. Walker was the manager's son.

"Nonsense!" said Hesketh, and they saw him disappear under the purifier. The air seemed clear and good; apparently there was no danger. Suddenly they heard Hesketh shout, then all was still.

"I'm going down," said Perrin.

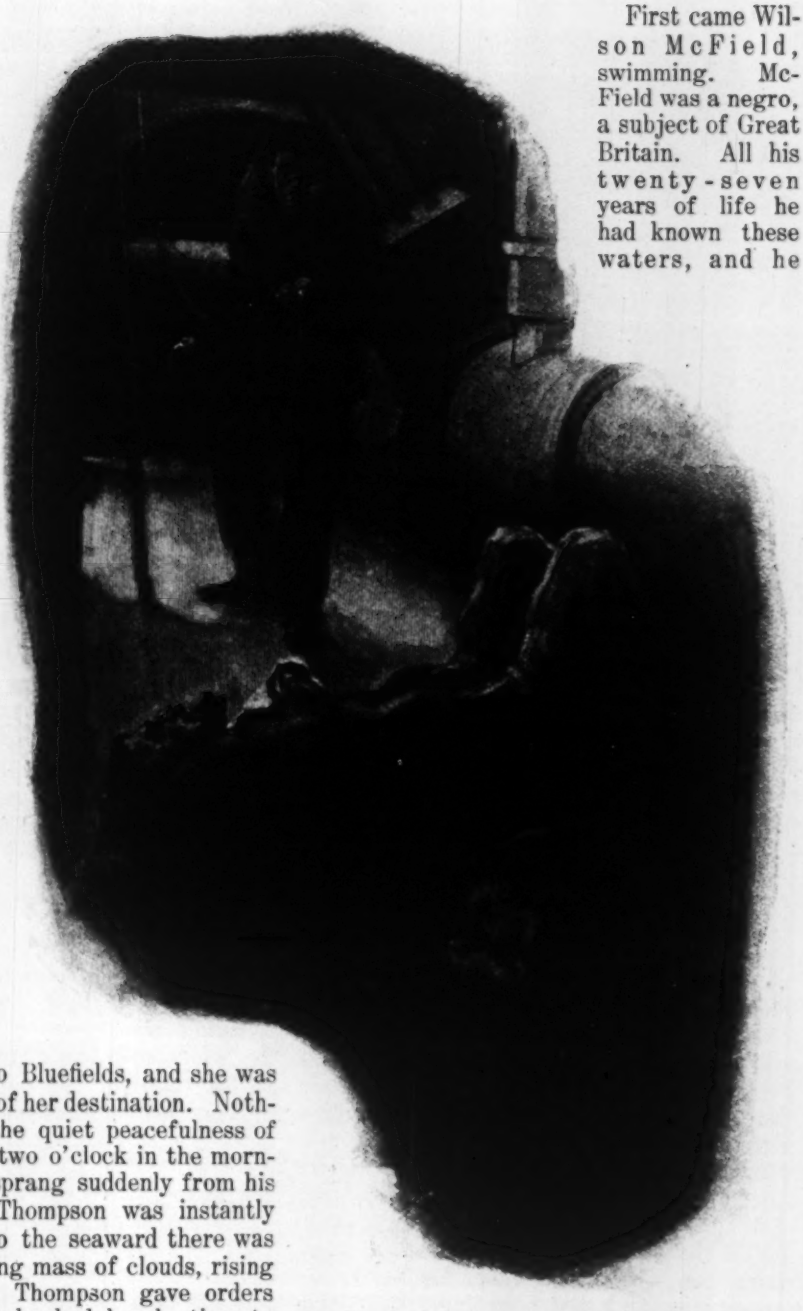
They tried to prevent him, but he too went down. He was gone several minutes. They called to him, but there was no reply; they called more loudly, and still no answer.

Walker came with a rope. He fastened it hastily about his body, and before any one could object he was on the ladder. The other men held the rope. From out of the chamber came the rank, suffocating odor of gas, but Walker went down the ladder swiftly. At the bottom he paused an instant, peering into the dark. There lay Perrin stretched full length on the floor with his hand gripped in Hesketh's collar. Perrin had dragged the assistant manager some distance, and had then been overcome and had fallen. Walker made a rush for the men and tried to fasten a rope around Hesketh. His eyes seemed bursting from his head; he felt himself falling, and ran wildly for the ladder. They helped him out, and he soon recovered his breath. The flow of gas was constantly increasing, but Walker went down again, holding his breath, made another dash, and succeeded in getting the rope under Hesketh. Then he ran out again. Four or five long breaths and he was at it again. This time he drew the rope around Hesketh, but it slipped from his numb fingers before he could tie it. He came out staggering. The fourth time he tied the rope, and those above pulled Hesketh out. An instant later Walker was down in the death chamber for Perrin. The rope was finally fastened, and Perrin also was lifted out. Walker fell unconscious. They worked over the three men diligently, using artificial respiration and almost every other resuscitation device. Walker recovered consciousness immediately, although he was much exhausted. Perrin lay for an hour before he showed any signs of returning life, then he, too, recovered slowly. But Hesketh never breathed again. In due course of time the deed of Perrin and Walker came to the attention of the Royal Humane Society, and Walker was awarded a silver, and Perrin a bronze, medal.

ONE other story from the records of the Royal Humane Society I like especially to think about, because the hero was an obscure negro seaman, sailing in an out-of-the-way corner of the earth, and yet his bravery was found out, and two of the greatest nations of the earth strove to see which could do him the greater honor. It

seems that nothing speaks louder for the growing appreciation among men of simple unselfishness, for that is the true essence of bravery.

It was a tropic night off the Cayman rocks in Nicaragua. The sea was as smooth as a pond, and the schooner "Dolphin" rested upon it almost motionless, with every sail set. For hours the helmsman had dozed at his place, and the crew and passengers, some twenty men in all, were lying about the deck, sleeping, it being too warm to go below. Thompson, the master, slept with the rest. The "Dolphin" was bound down from Prinzapulca to Bluefields, and she was almost within sight of her destination. Nothing could exceed the quiet peacefulness of the night. About two o'clock in the morning the helmsman sprang suddenly from his place, shouting. Thompson was instantly on his feet. Off to the seaward there was a huge, black, moving mass of clouds, rising out of the ocean. Thompson gave orders to shorten sail, but he had barely time to turn around before the blast struck them with terrific force. It was such a squall as comes only to those southern seas. The full-set sails furnished ample leverage, and within ten seconds the "Dolphin" was bottom up, her passengers and crew struggling in the water. She was a flat-bottomed, center-board boat of some forty-eight tons; she had been long in southern waters, and her sides were slimy and barnacled.



"AT THE BOTTOM HE PAUSED AN INSTANT, PEERING INTO THE DARK."

First came Wilson McField, swimming. McField was a negro, a subject of Great Britain. All his twenty-seven years of life he had known these waters, and he swam like a seal. Fortunately the vessel's helm lay deep in the water, owing to the weight of the anchor and chain which had dropped out when the vessel turned. Here, by grappling hard, but not without being severely cut by barnacles, McField succeeded in climbing on the ship's bottom. Then he shouted to the others, and one by one, as they

"ONE BY ONE . . . HE PULLED UP FIVE OF THE CREW."

reached the vessel's bottom, he pulled up five of the crew. But not all were saved. Bull Monrad, a passenger, went down within two feet of the boat. Cerf, Kister, and two Nicaraguans were never seen after the vessel turned. Even after the crew was safely perched on the "Dolphin's" bottom they had to cling their best, for the sea had now risen, and the wind was blowing half a gale, although the worst of the squall had passed. And thus they sat for over two hours, drifting at the will of the sea. Then a strange thing happened. Anderson, the cook, asserted that he heard pounding from within the vessel. They all listened and heard nothing. A little later Anderson again asserted that something was drumming on the ship's bottom under him. They thought that Anderson had been "turned" by the accident; but upon listening again, they all heard it distinctly, Anderson even insisting that he also heard voices. Some of the more superstitious had their own theories of this; but as the night dragged itself through, and the pounding continued, they finally made up their minds that some one was imprisoned in the cabin. They discussed the matter until it was broad daylight, and all the while the pounding was growing fainter. None of the white men could propose any way of saving those in the cabin, if there really was any one imprisoned. At last McField, the negro, said he would dive under and into the boat. They assured him he would not be able to get out again any more than those who were already there. But he insisted. They had secured a coil of rope that had been dragging from the vessel. One end of this was held by the men on the ship's bottom, the other end McField took in his teeth. Then he dove from the vessel into the sea, and quickly disappeared. He went down swiftly, passed under the gunwale, and then rose through the hatch. It was pitch dark, and the interior of the vessel was full of disturbed cargo and empty barrels and boxes. McField dove in among them fearlessly, holding his breath, and made for the cabin. He knew that if the men were really there, and had air enough left to breathe, he would

be safe enough; but if not, he also knew that he would probably never get back alive. The rope kept catching, and once he drove his head into a post with terrific force, but he kept on steadily. Finally, concluding that he had reached the cabin, he rose quickly, and an instant later his head was out of water. And yet, so foul was the air and so narrow the space between the top of the water and the ship's bottom that he could scarcely breathe. Everything was in absolute darkness; he could see no men, but just at that moment he heard again the familiar knocking. He called out. At first there was no answer; then he heard voices, faint but familiar. Swimming in the direction from which they seemed to come, he found two men braced against the cabin sides and holding their heads above water. Here they had been for upward of six hours, knocking and knocking. McField recognized one of them as a young rubber cutter named Mallitz, the other was a native Spanish-Nicaraguan called Obando. Both fell upon McField, clamoring to be saved, so that he was compelled to threaten them with instant death unless they obeyed him. He fastened the rope around Mallitz and gave the signal to pull. Mallitz took a long breath and went down. McField dived into the water with him. Mallitz was panic-stricken and entangled himself in the hatchway. McField lost precious seconds freeing him, so that when at last they went out under the gunwale both were nearly drowned. Mallitz was quite unconscious, and McField was more dead than alive when they reached the surface. They pulled Mallitz aboard, but McField would not follow. As soon as the rope was again free, he took it in his teeth and dove a second time, found the hatch and entered the cabin. Obando was almost uncontrollable with exhaustion and panic, but McField finally secured him with the rope, and both having taken long breaths, the signal was given to pull up. This time the trip was made without accident, and on reaching the surface both men were drawn on board.

About noon they sighted the steamship "Yulu," bound from Bluefields to Great River, and they were soon rescued, having been nearly twelve hours on the ship's bottom. They found that the "Yulu" had already picked up a Spaniard who had escaped on a hatchway door; all the others were lost.

In course of time, and in a roundabout way, the story of McField's bravery came to the attention of the United States Government, and the negro seaman was awarded a medal and fifty dollars in gold. Later the news reached England, and McField being a British subject, the Royal Humane Society awarded him a silver medal.

ON THE TENNIS COURT

More Dolly Dialogues

by Anthony Hope

Drawings by Howard Chandler Christy

"The Curate's Bump"

"WHAT is the harm," I asked at lunch, "in being fat?" and I looked round the table.

I had led up to this subject because something which fell from Mrs. Hilary Musgrave the other day led me to suppose that I might appear to be growing stouter than I used to be.

"It doesn't matter in a man," said Nellie Phæton.

"That," I observed, "is merely part of the favorite pretense of your sex."

"And what's that, Mr. Carter?" asked Dolly.

"That you're indifferent to a pleasing appearance in man. It won't go down."

"It would, if you ate less," said Dolly, willfully misunderstanding me.

"Napoleon was fat," remarked Archie; he is studying history.

"Mamma is rather fat," said Lady Jane, breaking a long silence; her tone seemed to imply that it was a graceful concession on the Dowager's part.

"I shouldn't say you ever had much of a figure," observed Dolly, gazing at me dispassionately.

"Mamma," resumed Lady Jane, with an amiable desire to give me useful information, "drinks nothing but lemonade. I make it hot for her and——"

"I should like to do that," said I longingly.

"It's the simplest thing in the world," cried Lady Jane. "You can do it for yourself. You just take——"

"A pretty girl," I murmured absently.

"I—I beg your pardon, Lady Jane. You see, Miss Phæton is opposite, and my thoughts wandered."

"It's no use talkin' sensibly where you are," said Miss Nellie very severely, and she rose from the table.

"Won't any one have any rice pudding?" asked Archie appealingly.

"If I were a camel I would," said I.

"Why a camel, Mr. Carter?" asked Lady Jane.

"A camel, Lady Jane, is so constructed that it could keep one exclusively for rice pudding."

"One what, Mr. Carter?"

I strolled to the window, where Dolly stood looking out.

"Dear Jane!" said Dolly. "She never sees anything."

"I wish there were more like her," said I cordially. "She doesn't inherit it from her mother, though."

"No, the Dowager sees a great deal more than there is there," laughed Dolly, glancing at me.

"But fortunately," said I, "not all there is in other places."

"Mamma says—" we heard Lady Jane remarking at the table. We strolled out into the garden.

"Now, isn't that provoking?" cried Dolly. "They haven't rolled the tennis lawn and the people will be here directly."

"Shall I ask Archie to ask somebody to get somebody?"

"They've all gone to dinner, I expect. Suppose you roll it, Mr. Carter. It'll be

"'EXERCISE IS, NO DOUBT, WHAT I NEED.'"

so good for you. Exercise is what you want."

"Exercise is, no doubt, what I need," said I, doubtfully eying the roller.

"It's the same thing," said Dolly.

"It's an Eternal Antithesis," said I, taking off my coat.

I began to roll. Dolly stood watching me for a moment. Then she went indoors. I went on rolling. Presently, raising my eyes from my task, I found the curate looking on; he was in flannels and carried a racket.

"Although," I observed to the curate, "I have convinced my reason that there is no harm in being fat, yet, sooner than be fat, I roll. Can you explain that?"

"Reason is not everything," said the curate.

"Your cloth obliges you to that," said I suspiciously.

"I'm in flannels to-day," rejoined the curate with a smile.

I liked that. I loosed my hold of the roller and took the curate's arm. We began to walk up and down.

"There is also," said I, "Romance!"

"There's little enough of that for most of us," said the curate.

"There has been too much for some of us," I returned. "But the lawn is smooth where the roller has been. The bumps—the pleasant bumps—are gone."

"They spoilt the game," observed the curate.

"They made the game," said I, frowning a little.

There was silence for a minute. Then the curate asked:

"Is Lady Jane going to play to-day?"

"I seemed like Fate, with that roller," said I. "Or like Time."

The curate smiled absently.

"Or like Morality," I pursued.

The curate smiled indulgently; he was in flannels, good man.

"As to Lady Jane," said I, recollecting myself, "I don't know."

"It's of no consequence," murmured the curate.

At once I knew that it was of consequence—to the curate. But my thoughts drifted in another direction, and when I emerged from the reverie I saw Lady Jane and the curate strolling together on the lawn, and Lady Mickleham approaching me in a white gown; she carried a red parasol.

"Archie and Nellie will be out directly," said she, "and then you can begin."

"They can," said I, putting on my coat and lighting a cigarette.

"Look at that poor dear man with Jane!" exclaimed Dolly. "Now, should you have thought that Jane was the sort of person to——"

"Everybody," said I, "is the sort of person—if the other person is."

"Of course he knows it's hopeless. The Dowager wouldn't hear of it."

"Really? And she hears of so many things!"

Dolly, after a contemptuous glance, began to inspect the lawn; I retired into the shade and sat down. Lady Jane and the curate strolled a little further off. Presently I was roused by an accusing cry from Dolly.

"She's found a bump," said I to myself, shaking my head.

"You can never do things properly," said Dolly, walking up to me.

"I certainly can't do many things in the way I should prefer," I admitted.

"You've left a great bump in the middle of the court."

My eyes strayed from Dolly to Lady Jane and the curate, and thence back to Dolly.

"It's not my bump," said I. "It's the curate's."

"You're getting into the habit," remarked Dolly, "of being unintelligible. I'm sure there's nothing clever in it. I met a man the other day who said he never understood what you meant."

"You'd understand if you'd stayed; why did you go away?"

"To change," answered Dolly.

I was pleased.

"It's an old trick of yours," said I.

"What did you mean by the bump being the curate's?" asked Dolly, returning to the point.

I entered into an explanation. There was plenty of time; the curate and Lady Jane were strolling, the click of billiard balls through the open windows accounted for Nellie and Archie.

"I see," said Dolly. "Poor man! Do you think he'd like it left?"

I walked leisurely towards the roller, Dolly following me.

"If it were my bump," said I, laying hold of the roller, and looking at Lady Mickleham.

Lady Mickleham smiled—under protest. It is a good enough variety of smile.

"If it were my bump," said I, "I should reduce it—so—and so again," and twice I passed the roller gently over the bump.

"It's awfully small now," said Dolly; and her voice sounded regretful.

"It's not so large as it was," said I cheerfully.

Dolly let down her parasol with a jerk.

"You're horribly disagreeable to-day," she said.

I leant on the handle of the roller and smiled.

"DOLLY STOOD WATCHING ME FOR A MOMENT."

"You're very rude and—and——"

"Nobody," said I, "likes to be told that he has no figure."

"You are an Apollo, Mr. Carter," said Dolly.

That was handsome enough.

"I would let it alone, if it were my bump," said I. "Hang these rollers."

"It is your bump," said Dolly.

As she spoke, Archie came out of the billiard-room. Lady Jane and the curate hastened to join us. Archie inspected the lawn.

"Why, it's been rolled!" he cried.

"I rolled it," said I proudly.

"Jove!" said Archie. "Hullo, though, old chap, you haven't been over here."

He had found the bump.

"I have been over there," said I, "oftener than anywhere else."

"Give me the——"

"Now, Archie, do begin to play," said Dolly, suddenly.

"Oh, well, one doesn't hurt," said Archie.

"It won't hurt much," said the curate; upon which I smiled at Lady Jane.

"What is it, Mr. Carter?" she asked.

"He's so right, you know," said I.

"'YOU'RE HORRIBLY DISAGREEABLE TO-DAY.'"

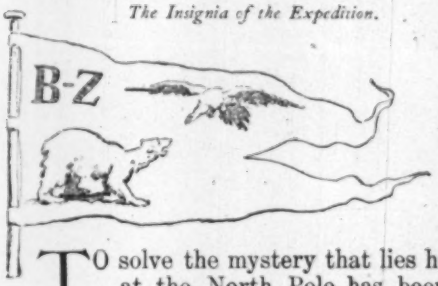
HOW I HOPE TO REACH THE NORTH POLE.

By Evelyn Briggs Baldwin.

Commander of the Baldwin-Ziegler Polar Expedition.

[Editor's Note.—This article constitutes Mr. Baldwin's only announcement to the public of the plans and purposes of the Baldwin-Ziegler Polar Expedition, which sailed from Tromsoe, Norway, July 17th. Evelyn Briggs Baldwin, the commander of the expedition, was born at Springfield, Missouri, July 22, 1862. After studying and traveling in Europe many years, he entered the service of the United States Government as observer in the signal service. Mr. Baldwin accompanied the Peary Expedition of 1893–1894 as meteorologist. In 1897 he journeyed to Spitzbergen, hoping to join Andrée's expedition, but there was no room for him in the balloon-car. Later he accompanied the Wellman expedition of 1899.]

The Insignia of the Expedition.



To solve the mystery that lies hidden at the North Pole has been for many years the cherished ambition of my life. That I am now accorded an opportunity to realize this ambition is due to the patriotic munificence of Mr. William Ziegler, of New York, who has placed at my disposal unlimited means to carry out my plans.

Certainly no expedition ever sailed for the North with so comprehensive an equipment as ours, or perhaps with prospects half so bright.

From the very first Mr. Ziegler has evinced a sympathetic interest in the fruition of the single purpose which I have so long kept steadfastly before me. On the day when he made my heart glad by announcing that he would finance the expedition, he said: "I do not want to see any but an American win the honor of the discovery of the North Pole, when so many of our brave countrymen have sacrificed their lives in the effort to attain it. I think America is great enough and progressive enough to have that distinction."

To Mr. Ziegler, therefore, will belong much—I may, without doing my comrades injustice, say at least half the credit, or glory, as it is commonly expressed, if this expedition succeeds in planting the Stars and Stripes first at the Pole.

Our fleet comprises three vessels. The "America," our flagship, as some one has expressed it, is a three-masted ship-rigged steamer of 466 tons net burden, driving a single screw. Her length over all is 157 feet; beam, 27 feet; depth, 19 feet. She is constructed of solid oak throughout, having a sheathing of greenheart from keel to waterline. She is two feet thick on her sides, these increasing to two and a half at the bow. Only two years ago she was given a new keel and hull, and shortly before this new boilers and engines added to her original power or capability of pushing her way through difficult fields of polar ice. Moreover, in addition to the foregoing, and for the present voyage, she has been provided with new masts, decks, and special accommodations for the crew. Besides all this, she now boasts enrollment as a steam yacht in the New York Yacht Club, the burgee of which I have the honor to fly from her masthead. Before being rechristened, she was held to be the crack whaler of the entire Dundee fleet. And after all the repairs and overhauling at Dundee had been done, I felt certain that I had beneath my feet as stanch and true a craft as I could wish for.

The "Frithjof," a Norwegian sailing-vessel, that has seen much service in the Arctic seas, was chartered to serve as a tender or supply steamer to the "America." She is of the same general construction as the "America," although smaller, registering 260 tons net. Her cargo capacity is about 300 tons. In 1898 she bore me to Franz-Josef Land, in 1899 she carried the Swedish Expedition under Professor Koltoff from Spitzbergen to Greenland, and now, in 1901, I expect to take her farther north than she has ever been before. I consider her peculiarly well adapted to the work mapped out for her, being in command of Captain Kjeldsen, who, for more than a quarter of a century, has taken many a vessel from

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E. B. Baldwin.

THE OFFICERS AND CREW (THIRTY-SIX IN NUMBER) OF THE BALDWIN-ZIEGLER POLAR EXPEDITION.

From photograph taken on the "America" the day before sailing from Dundee, Scotland, for the Pole, June 27, 1901.

Norway to Spitzbergen and Franz-Josef Land in the ice, which challenges man's utmost skill in making a passage. It was Kjeldsen, too, who, twenty-eight years ago, was in command of the tender "Isbjorn," which acted as a supply vessel for the "Tegetthoff," the steamer under command of Payer, which bore the Austro-Hungarian Expedition northward on its eventful voyage of discovery—the discovery of Franz-Josef Land itself.

The third vessel is the "Belgica," which carried the Belgian Antarctic Expedition of 1897–1899 under Captain Gerlache. Her experience in quest of scientific treasures from the southern regions of ice, as described in Dr. Frederick A. Cook's "Through the First Antarctic Night," likewise bears testimony that she is well fitted for arduous work in the North. She, too, is similar in construction to the "America," and is 110 feet long, 26 feet wide, and draws 15 feet of water. Under the able direction of Captain John Bryde and the sturdy crew of Norwegians, I do not doubt for a moment that she will accomplish the mission which I have established for her.

The "America," after taking on all that part of her supplies purchased in the American and European markets, sailed from Dundee, Scotland, for Tromsoe, Norway, at midnight on June 28th, and was there joined by the "Frithjof." By the time this article is published both vessels will be well on their way fulfilling their respective missions.

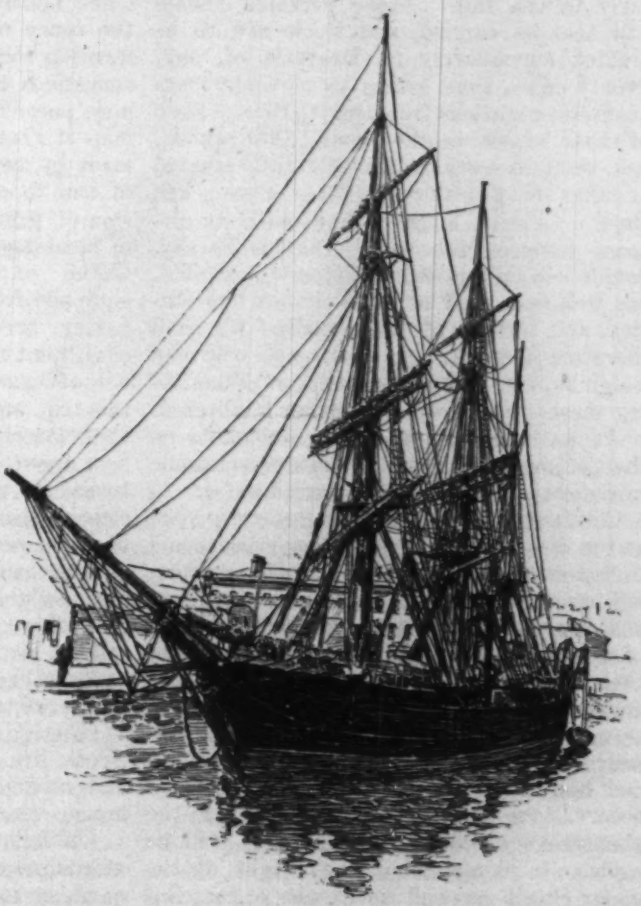
The "Frithjof," while she will carry a large portion of our equipment, will be used to augment our supplies from the resources of the Northern Seas. She will have on board a party of skilled hunters, trained by long experience in the chase of seals, walruses, bears, etc., and from my knowledge of the regions which she is to traverse, I am convinced that a large cargo of game will thus be procured. This meat will be deposited at various points on the islands in the southern portion of Franz-Josef Land, where stations will be established for the subsistence of our large pack of dogs. Numerous places are well known to me where game can be secured, even after the freezing over of the seal late in the autumn, and I purpose utilizing this knowledge in order to keep our pack of dogs at all times in the

best possible condition. In other words, we intend, as it were, to colonize Franz-Josef Land temporarily, at least.

From Tromsoe the "America" will proceed to Solombala, in the district of Archangel, on the White Sea, arriving there late in July. Here she will take on the 400 dogs, fifteen Siberian ponies, and a large quantity of other equipments, which were purchased more than a year ago. At the present time these are being brought overland from beyond the Ural Mountains in Siberia by Tronthein, who furnished the dogs for Dr. Nansen, for the Duke of the Abruzzi, and for other expeditions. Here, also, six well-chosen young Siberians, well-trained in the handling of dogs, will bring our expedition membership to forty-two in number, this being exclusive of the crews of the "Belgica" and the "Frithjof." From Solombala the "America" will proceed to Hammerfest, Norway, to take on the very last shipments of supplies which are being forwarded to that port by the "Auguste Victoria." These supplies will include a duplicate shipment of machinery for our gasolene launch, the original having in some unexplained manner gone astray.

This done, the "America" will direct her course toward Franz-Josef Land. Here she will work in conjunction with the "Frithjof," it being my desire to proceed with both steamers as far northward through the British Channel as possible, their ultimate destination being Prince Rudolf Land, upon which the Italian Expedition spent the winter of 1899–1900. So much I can, however, scarcely hope for, and I shall be well content if I can establish the main station of the expedition at some point on the eastern side of the British Channel, on about the eighty-first degree north latitude. The manœuvring of the two ships will continue as long as the conditions of the ice may permit, until about August 20th, when the "Frithjof" will discharge her cargo on the most convenient ground and then return direct to Tromsoe.

With the freezing up of the water spaces between the islands of Franz-Josef Land, it will be comparatively easy to move our entire pack of dogs with sledges loaded with game to a still more northern point—to some spot where we shall hope that the "America" may remain frozen in and our headquarters established. Then will begin the work of transporting all of our necessary supplies and equipment to the very northernmost point in Franz-Josef Land, where we shall build houses and establish an additional base for the winter. In order to facilitate the movement of this large expeditionary equipment, use will be made of the fifteen Siberian ponies, each of which is capable of drawing from 900 to 1,200 pounds. The Siberian pony is well suited for the work required of it in this expedition, being inured to cold and exposure, and accustomed to eat not only grain food, but dried fish-heads as well. Owing to the generally level character of the ice between the islands this trans-



THE "AMERICA."

portation should be readily accomplished. The value of these animals may be estimated from the fact that each is capable of drawing as much dead weight as a team of twenty dogs could do, and some of them will, therefore, be used in the first part of our dash to the Pole, being slaughtered from time to time for dog food; or we may decide to slaughter them all after they have aided us in the transportation of supplies to our northernmost house in the world—that is, on the northernmost point of Franz-Josef Land. Here their flesh will be kept over winter in hermetically sealed tanks made for this purpose. On an average we shall probably derive 800 pounds of good dog food from each pony, all of which, it will thus be seen, will not only have transported a large weight of equipment and food upon the sledges, but also itself upon its own legs. We also have with us a twenty-two-foot gasolene launch, which will be of great service in the waterways between the islands, where the current is too strong to permit the surface to freeze early in the fall. Three portable houses will also be carried, and these are to be erected successively at intervals of, say, twenty miles, thus giving us movable headquarters or stations from time to time. Each of these houses weighs about 1,000 pounds, and, being in sections, can be readily erected or taken down in thirty minutes or even less time. As each house is built with an air-space between the walls—that is to say, double—in case it should be found desirable, one wall only need be used at any one station, and instead of three houses we shall therefore have six. As each house will then weigh but 500 pounds, our work of establishing these stations will be further facilitated.

At our base station, more particularly on the "America," the following scientific work will be energetically carried on.

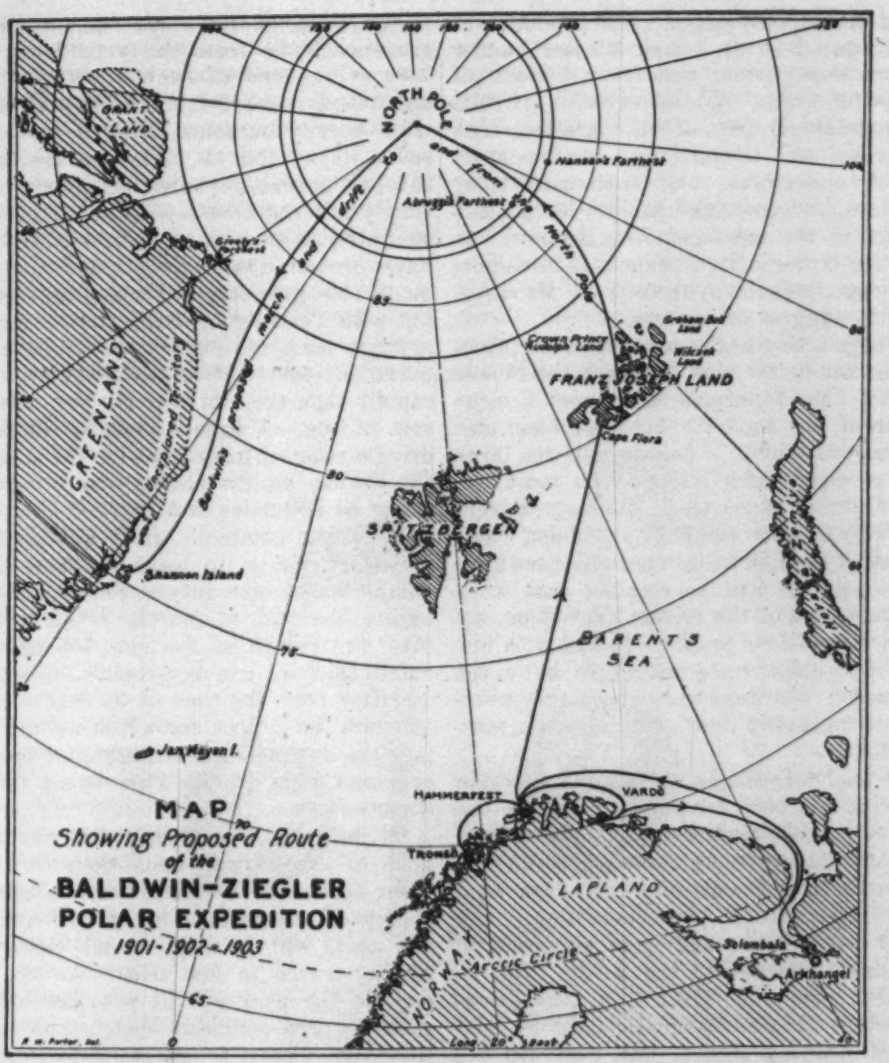
Continuous meteorological records, such as the direct readings of the barometers and thermometers, checked by the self-registering barographs and thermographs; the force and direction of the winds, including the use of the anemometer in order to determine their velocities; humidity of the air and amount of precipitation. By means of the theodolite and the nephoscope we shall endeavor to determine the velocity, direction, and height of the upper clouds. Special observations and records concerning the phenomena of the Aurora Borealis will be made. In determining the height of the upper clouds as well as of the Aurora Borealis, we shall make use of the telephone, having a line not less than a few miles in length, at either end of which will be stationed an observer, thus giving us our base line from which to form our calculations.

Our magnetic work will comprise absolute readings each Monday, relating to inclination, declination, and horizontal and vertical intensity; every Tuesday, readings of declinations and horizontal intensity will be made at five-minute intervals for twenty-four hours. On our sledge trips we shall determine the declination at every stopping-place. At our base station our astronomer will determine accurately our latitude and longitude, the latitude by means of a fine zenith telescope, and the longitude by the observations of certain stars. Time determinations for pendulum swings will be made by means of a meridian transit having a focal length of twenty inches and an aperture of two and one-half inches. Observations on low stars at low temperatures will be frequently made for determining refraction by means of the eleven-inch vertical circle. We shall also make hourly observations on the tides for the space of two months or more, supplementing these by as many simultaneous observations at outlying points as conditions may permit. As extensive and accurate a map of Franz-Josef Land as possible will be made by means of triangulation and the use of the topographical camera. Determination of gravity will also be noted by means of pendulums.

The expedition is exceptionally well equipped for photographic work, no expense having been spared to make our camera equipment complete. In addition to a number of cameras specially manufactured for this trip, and fitted for both films and plates, the "America" has on board a moving-picture apparatus, and with this we shall hope to secure many realistic scenes of our exciting life in the North; besides this, we are to use a recently invented apparatus known as the omniscope, by means of which we shall be able to obtain panoramic views of extensive scenes, such as the chase of the walrus, bear, and seal, and panoramic views of coastline glaciers, far effects, our large transport teams, encampments, etc.

Paintings and sketches, too, not only of Arctic life, but also of its indescribable color and magnificence, will be made by special artists who accompany us.

The failure of former Arctic expeditions is attributable either to lack of proper equipment, or to inability to transport it over the long stretches of treacherous sea ice. The



history of nearly all the expeditions which, since Hudson's time, have set forth to determine the secrets so jealously guarded by the Ice Sphinx of the North conclusively proves this. The present expedition, however, typifies the spirit of the twentieth century, in that it will be enabled to take up the quest where our predecessors were compelled to abandon it.

Our food supplies are of the best quality, and our stores are complete. We carry over 100 tons of dog food alone, including pemmican, dried fish, and dog biscuit. Even the dog food is well suited for human consumption. We have with us, too, a large stock of what might be termed luxuries according to Arctic requirements, many of which would tempt the taste of the most fastidious epicure. The list of our eatables would be far too long to be repeated here. Let a few samples suffice. Of course there is beef in all its condensed forms—extracts, tablets, etc.—pork and beans, in the form and size of an ordinary biscuit, which may be eaten as one would partake of a cracker, or boiled as a nourishing and wholesome soup. We have a sufficient supply of coffee in tablet form known as kado. This preparation represents the very quintessence of the berry. A single tablet will make a cup of good coffee, but I value it chiefly because a tablet may be eaten without being prepared in the usual manner, affording as much cheer and warmth to the stomach in this as in any other form. Kado will be of great service as part of our noonday lunches on the sledge trips, when there is little or no time to prepare cooked meals. We also carry 1,500

tins of crystallized eggs. This product was manufactured at St. Louis, Missouri, under my own supervision, and from a stock of last spring's eggs—72,000 of them. Fruits and vegetables, too, of all varieties, both evaporated and tinned, form an important part of our stores. Of condensed milk, chocolate, and lime-juice tablets we are also supplied in the most generous manner. In brief, our larder lacks nothing that foresight, experience, and the generosity of Mr. Ziegler could suggest or procure.

Perhaps the greatest element that promises success in my plan to reach the Pole is the fact that I purpose to compel a large portion of our food for both dogs and men to transport itself. I believe that the large pack of dogs which I have been most fortunate, indeed, in securing, will help me very materially to solve the knotty problem which has baffled the illustrious men who have gone before me. It will be recalled that when Captain Cagni, of the Italian Expedition, set out on his perilous journey, he had with him about 100 dogs; upon his return but seven remained. The dogs were necessarily overladen to transport their own and their master's food.

The load for sledges as adopted by other explorers has been from seventy-five to one hundred pounds dead weight for each dog. Dogs thus laden, being forced constantly to put forth their utmost efforts to draw their loads, fell into a poor condition, their energy being overtaxed from the start of each day's journey to the finish. The insufficient food with which they were forced to content themselves contributed to their lack of drawing power, and even when a dog died by the wayside, he was so emaciated that his body supplied but scant nourishment for his fellows. I have contended for several years that this overweighting was injudicious, nay, fatal, and I shall at no time assign a greater weight than fifty or sixty pounds to each animal. Under my plan I shall have at my disposal 400 sleek, fat, well-fed dogs, weighing on the average not less than seventy-five pounds gross. Each dog, if slaughtered, will yield from thirty to forty pounds net of good dog food. It is an axiom in Arctic work that a dog can render good service if provided with one pound of food each day. Assuming that my pack cannot be provided with any extra food, which is far from being the case, however, as I shall show further on, the pack itself could render efficient service and largely subsist upon itself for an approximate period of 100 days; that is to say, there would be from thirty to forty survivors at the end of such a period. Peary and Astrup covered 1,300 miles in Greenland with heavily burdened sledges in seventy-seven days; that is, they traveled at the rate of seventeen miles per diem. True, they journeyed upon a smooth surface, else, weighted as they were, their sledges would have broken down. Nor could they have made this great record upon the sea ice; but with very lightly burdened sledges and a large pack of dogs, it would be a comparatively easy matter to travel even more rapidly than they did over the very roughest sort of ice. I have known an Eskimo to drive a team of five dogs with the weight of the Eskimo on the sledge (say 150 pounds) as far as 100 miles in a day.

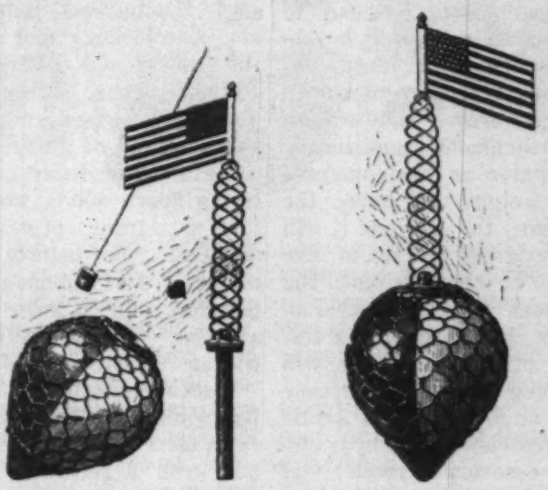
With our complete outfit it will not be necessary for us to leave our base at the northernmost extremity of Franz-Josef Land before the 22d of March, 1902, a month after the return of the sun, because I calculate that we can accomplish in less than 100 days from the time of leaving our headquarters the object for which we are striving, the distance in a straight line from our proposed base to the Pole being but 550 statute miles.

Of course, I do not intend to compel the dogs to live entirely upon their own flesh. Their food will be varied with a generous supply of condensed dog food, and thus the pack will be kept at all times while on the march in fine trim. All the loose dogs in the pack will be provided with adjustable pack-pouches, each pouch to contain from fifteen to twenty pounds of condensed food, fit for either man or dog. By this simple expedient I expect to move with great rapidity over the ice field toward the Pole, and nothing short of contingencies which no human power could avoid, will prevent us from planting the flag of our country at the northern apex of the earth.

Having once established a strong outpost at the northernmost extremity of Franz-Josef Land, at about eighty-two degrees north, the early part of the spring of 1902 will be utilized to throw out advance stations on the sea ice in a northeasterly direction before the ice shall have acquired much movement, so that it is not at all improbable that we shall begin the real march forward from a point between latitude eighty-two degrees and eighty-three degrees not later than the 1st of April. With our large pack of dogs, with our canvas and our silk tents

and shelters and the most perfect complement of improved sledges, collapsible boats, skis (Scandinavian snowshoes), etc., our northward trip cannot fail to be both rapid and safe. Is it not, therefore, reasonable to suppose—nay, even to believe, with full degree of faith—that we shall be enabled to conquer at last the elements of the icy North, against which man has striven so long and yet so faithfully?

In making our initial march over the ice lying to the northeastward of Franz-Josef Land, we shall thus doubtless be aided somewhat by the drift of the ice in a westerly direction. By making due allowance we shall be carried but little, if any, out of our course northward. Granting our attainment of the coveted goal, it is certainly incumbent to make provision for our escape, or rather, for our return journey. The great Polar current, which is known to sweep southward along the rugged east coast of Greenland, would appear to be our surest and safest way back. The "Belgica," therefore, leaves Sandefjord, Norway, early in August for the purpose of establishing an auxiliary station on that coast, preferably upon Koldewey Island, or, in failure of that, upon Shannon Island, and even in failure of attaining Shannon Island, at some point farther south. The "Belgica," too, carries three portable houses and a large quantity of food and equipment, such as sledges, boats, coal, petroleum, and clothing, and eatables sufficient for twelve men for an entire year. She will erect signals along the coast, by means of which the locations of caches and provision depots may be determined by returning members of our party. Two of these signals will consist of steel tubes, each thirty feet high, each bearing at the top a weather vane displaying some of the expedition's insignia. Those having in charge the establishment of this station have been fully instructed as to the very great importance of it, for upon it the lives of men are likely to depend. Even should any of our party be carried westerly by the swiftly moving ice lying to the northward of Franz-Josef Land, they would still have ahead of them a place of refuge. The moral effect, too, of the establishment of such a station will also be great. Once our party is at a high latitude north of Franz-Josef Land, the word will be "Onward, ever onward." To the Pole at all hazards, and from the Pole by the safest and surest route. Evidently to the nearest land any party in such a position would most naturally make its way, and therefore to the northeast coast of Greenland we would look for our first place of rest and recuperation, there where the musk-cattle are known to abound; thence southward along the unexplored coast we would make our way, aided not only by the southerly drift of the ice, but also by the game of both land and sea, and whether asleep or awake, whether journeying rapidly or detained stormbound, hope would ever be before us, rendered stronger by the knowledge that every moment would be bearing us toward a well-established station.



Mr. Baldwin's News Buoys.

No previous expedition to the North has ever made such complete arrangements for the transmission of news back to civilization as that which I have the honor to command. Six hundred buoys have been provided and are to be set adrift, 400 of them to be used in connection with our work in and from Franz-Josef Land, and the balance to be deposited on the east coast of Greenland, for use of any of our party who may chance to arrive there. Each buoy is to contain news of our condition and progress.

To send back these buoys we are provided with forty balloons packed for transport in hermetically sealed tin cases. Each balloon, with the exception of two larger ones, has a capacity of 3,000 cubic feet, and measures when inflated thirty-one feet in height and sixty-three feet in circumference. They

will be inflated with hydrogen gas made by the vitriolic process.

It is intended that some of these balloons will be released at intervals during the Arctic night, and each will be freighted with a number of the news buoys, containing messages inscribed upon parchment. The buoys will be fastened to a pendant line, one beneath the other. The balloon when inflated to its full capacity will carry the buoys upward not less than three miles, and southerly air currents will waft them on their several journeys. Generally they will be placed afloat during the prevalence of northerly winds. The natural leakage of gas will probably cause the balloon to descend to the ice or water, as the case may be, in from eight to ten hours after its ascension. By an ingenious arrangement known as the liberator, the lowermost buoy will be released from its attachment immediately upon contact with water or land surface. The release of its weight will cause the balloon to rebound into the air, and it will then continue its progress for about five hours, dropping again at intervals, until the very last buoy has been deposited either in the Polar current or in the open waters. The carrying power of these balloons will ensure the buoys being placed where they will almost certainly be picked up by Arctic whaling and sealing vessels or even by transatlantic liners. The recovery of these buoys will establish much valuable data concerning the air and sea currents of the Arctic regions. Of the thirteen buoys probably set adrift by Andrée during his memorable balloon voyage, two have thus far been recovered; one, dated beyond the eightieth parallel, was found some months later off the north coast of Iceland, while the other was picked up on King Charles's Land to the eastward of Spitzbergen, nearly 1,200 miles from Iceland. It should be remembered that Andrée employed no device for releasing his buoys, being compelled to throw them from the car of his balloon, and it is possible that some of them were therefore crushed and broken by their fall. It is only fair to assume, therefore, that a much larger proportion of our buoys will be recovered.

The expedition numbers thirty-five men besides myself, and includes a geodesist, a meteorologist, surveyor, photographer, translator, cartographer, and secretaries.

There is considerable musical talent in our party, and in order to give vent to their several talents it was necessary to provide for a violin, guitar, mandolin, banjo, autoharp, single and double accordions, a triangle, tambourine, ocarina, violoncello, bugle, harmonica, and cylinder flageolets. With these, and a carefully selected library of choice books, boxing gloves, fencing foils, gymnastic paraphernalia of various sorts, and a variety of games, we shall manage to while away probably all of the tedious and trying hours which would otherwise lie before us during enforced hours of physical idleness. We believe in employing every talent of the component members of the expedition, and consider that therein will lie a means of maintaining harmony and goodwill among our unusually large party.

I desire here to emphasize the fact that the Baldwin-Ziegler Expedition was organized *to reach the Pole*. Neither scientific research, nor even a record of "Farthest North," will suffice; only the attainment of that much-sought-for spot where one can point only to the south can satisfy our purpose.

If, from any cause not now foreseen, our efforts during the summer of 1902 should prove fruitless, we shall remain in Franz-Josef Land until the spring of 1903, when the effort will be renewed. Fresh supplies and equipment will be forthcoming, and 1903 will find us fully prepared for another struggle with the unknown. But I do not anticipate such a contingency.

THE MAN WHO GAVE NO TIP

BY BENJ. H. RIDGELY.

HENRY HARRISON SPRAGUE was a sturdy, rather old-fashioned American gentleman, a bachelor of sixty, who, in spite of the fact that he had never been abroad before, assimilated the manners and customs of the Old World in general with unusual facility. But there was one custom of Continental Europe that my fine old friend would not accept.

This was the *pourboire* habit. Everybody knows what *pourboire* is. In Germany it is *trinkgelt*. In Italy, *propina*. The Spaniards also call it *propina*, but with a different pronunciation. It exists in all countries and in all languages. In the United States and England it is simply a "tip." Mr. Henry Harrison Sprague, I say, not only would not accustom himself to this habit, but resented it vigorously as an imposition little short of blackmail. He held that when he had paid his hotel bill his obligation ended. The eager and brazen gathering together of the servants at his departure, with a sort of stand-and-deliver look in their eyes, was, he declared, an unlawful assemblage; a conspiracy to blackmail and browbeat; in short, a mere organized scheme of extortion; and never, he said, would he give the brigands a penny.

When he passed through Geneva for Basel and the Rhine country, with the intention of returning within three weeks to spend the summer knocking about Switzerland, I warned him that he had better not try to practise his principles within the domain of William Tell.

"Nonsense," he said almost angrily; "I would rather be carried up Mount Blanc and held for a ransom than to give the bandits a farthing."

I received a letter from him a month later dated from Lucerne, in which he said that the "unlawful gatherings" were more persistent and annoying in Switzerland than they had been elsewhere, but that he was still more determined not to yield.

"I am preparing a speech," he said, "which I shall formally deliver to the rogues when I leave B—— next week."

And he did. It was at a certain

"'Preparing a speech.'"

"'You may . . . imagine . . . my pleasure . . . when I see by your presence here . . . that I was not forgotten at all.'"

famous hotel in the Oberland. I have the whole story from an eye-witness. Mr. Sprague was the only guest leaving by the afternoon express, and he enjoyed a monopoly of the "departure" when he came down about half-past three, and quietly paid his bill at the hotel "bureau." There was the usual "unlawful gathering" at the exit, and instead of coldly walking past, as had been his habit, Mr. Sprague stopped, handed his satchel to the conductor of the omnibus, and assuming the manner and voice of a man who was responding to a toast, spoke as follows:

"It is evident, my friends, that you are gathered here to speed the parting guest. I am much touched and flattered by so fine a mark of your courtesy and solicitude. And yet, I think, I may say without undue egotism that this is not unusual. I have found in all the hotels of Switzerland that the greatest interest was taken in me at the moment of my departure, but never, I assure you, have I felt more flattered than I do to-day. I had thought I was quite forgotten in this great hotel; more than once when I rang my bell for ice-water nobody answered. I have on several occasions waited as long as thirty minutes for my *café au lait* without seeing or hearing a sign of the amiable blond youth I had sent for it. I have frequently pleaded in vain in the morning to get back my boots. And I have often noticed that you, Julius (turning with a beaming smile to the head waiter), have worn a far-away, world-tired expression when I have vainly tried to catch your eye at dinner for a second helping of *pâté de foie gras*. And you, my good girl (addressing the chambermaid), I have more than once been impressed by your incomparable inability to answer my bell for hot water. Need I say that all these seeming little indifferences served to pain and dishearten and even to mortify me? Indeed, they distressed and saddened me; they made me feel as if I were alone in a great hotel in a foreign land without one friend. You may, therefore, imagine my pleasure and satisfaction when I see by your presence here to-day, at the moment of my departure, that I was not forgotten at all; on the other hand, that you were thinking of me all the while. I repeat that I am deeply moved, and that I say *adieu* reluctantly. Let me, in conclusion, thank you with all my heart for this beautiful and touching evidence of your interest and so-

". . . gravely raised his hat and waved a stately farewell."

licitude. *Adieu*, my friends. *Au revoir.*" And before the pampered menials could fully appreciate the significance of the episode my friend had stepped into the omnibus and was *en route* to the station. As the vehicle disappeared around the corner he gravely raised his hat and waved a stately farewell with his hand to the astonished gathering. But Swiss hotel servants are materialists, not humorists, and Monsieur Julius, the distinguished *maître d'hôtel*, is anything but a dull man. My friend's unexpected oration had mystified him at first; but as the omnibus swung out of sight around the corner the import of it all struck the eminent flunkey, and he turned to his brother domestics and said:

"*C'est un sale farceur, vous savez.*"

"*Cochon!*" ejaculated the fair Antoinette of the third floor, resentfully.

"Il aura de mes nouvelles pendant Son voyage en Suisse,"

added the *concierge* viciously.

Alas for my poor friend! He had had his fun, but he was to fall upon hard lines. It is as easy to telephone from one town to another in little Switzerland as from station to station in New York or London. Who shall say what the great *concierge* told his distinguished colleague at the Hôtel de la Plage when he called him to the audiphone a few moments later? It is enough to know that the name of Sprague was spelled out very plainly, the person of Sprague described with unmistakable exactness, and the offense of Sprague set forth in all its unpardonable detail.

It is not the purpose of this sketch to set forth minutely all that Henry Harrison Sprague was made to suffer during the next six weeks. It is unnecessary to tell how he was discriminated against at the *table d'hôte*; how he never saw any part of the chicken except the legs; how his bell was never answered promptly, his clothes never brushed, his boots never polished, and his baggage never brought up or down on time; how the impertinent *femme de chambre* always tossed her head contemptuously when he ordered hot water in a hurry; how the *maître d'hôtel* eyed him sternly and coldly whenever he left the dining-room; how he was made to miss the express trains regularly, and how his baggage was kept over night in railway stations and even in the hotel stables. It is enough to say that wherever he traveled he was a marked man. The hotel servants knew of him long before he arrived. They had a name of their own for him. They called him "*le cochon*," which is about the vulgarest term of reproach in the French language. They made him a jest and a reproach in the servants' dining-hall of every first-class hotel from Lucerne to Lugano, from St. Gall to Geneva. Even the servants of hotels he had never visited knew of him and talked about him and yearned for him.

The concierge telephoning.

"*. . . never saw any part of the chicken except the legs.*"

One day he happened to notice the word "*fédéral*" written in chalk on his trunk, and he suddenly remembered that he had seen the same word there before in a different handwriting.

"What does this mean?" he asked sternly of the *concierge* of the Hôtel du Beau-Jardin at a certain famous little town in French Switzerland, where he happened to be staying at the time.

The menial shrugged his shoulders.

"Perhaps monsieur has been indiscreet," he answered artlessly. "Perhaps he has failed to give some negligent hotel servant a *pourboire*. But, *parbleu!* how should I know what such chalk-marks mean?" he added, with his tongue in his cheek.

Mr. Sprague's face hardened.

"I also find the word '*communal*' written on my valise wherever I go. What does that mean?" he asked.

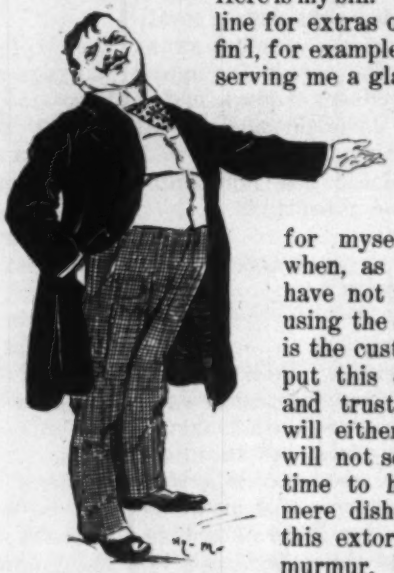
The *concierge* smiled mysteriously.

"Perhaps some of these lazy hotel domestics have a secret order," he suggested blandly. "'*Communal!*' ha! that might be a sign of the society; it might signify, '*Ce monsieur n'a pas été trop gentil pour nous. Il ne donne jamais du pourboire.*' But how should I know?" And

the distinguished domestic looked as innocent as the little lamb of Mary.

Henry Harrison Sprague went to his room and thought the matter over long and bitterly, and finally decided to make another public speech. It was this second remarkable oration that served to bring me officially into the case, and out of it grew famous proceedings.

Mr. Sprague chose his hour well for leaving the Hôtel du Beau-Jardin. It was at five o'clock in the afternoon, when he knew there would be no other "departures," and when he also knew that all the servants would be assembled to see him off, and would give him their undivided attention. For any other guest there would not have been so distinguished a gathering; but these hotel servants were fighting for their principles, and there was not a single first-class hotel in all Switzerland from which he could have accomplished his departure without running the gauntlet. The great man of the dining-room, the eminent *maître d'hôtel*, his "favorites" beautifully oiled, headed the line.



"'Perhaps monsieur has been indiscreet.'"

Henry Harrison Sprague stopped, facing the assembly, and looked about him coldly and deliberately; then he slowly put his hand in the inside pocket of his coat, and as he did so such a look of triumph came over the face of the intriguing *concierge* as Napoleon might have worn at the great St. Bernard. But it was not his purse that Henry Harrison Sprague withdrew from the inner pocket of his coat; it was the hotel bill which he had just paid; and, unfolding it with great care, he adjusted his spectacles and, looking squarely at the *concierge*, began in a low, clear voice to make his speech.

"The eminent maître d'hôte."

"Before leaving this establishment," he began, "I want to say a few words, which I hope you will all understand and remember. You are assembled here for the one purpose of bullying me into giving you money. In spite of the fact that I have here a bill which distinctly states that lights and *service* are included in the charges itemized, you are boldly gathered here to extort further tolls from me, and, what is a still greater shame, your employer—to whom I have just paid my bill, which is an excessive one for what I have received—not only permits this outrage, but by his presence aids and abets it.

Here is my bill. I am charged on every line for extras of some character. I find, for example, an extra charge for serving me a glass of ice-water in my room; I find that I am charged three francs for the use of the omnibus to the railway station for myself and my baggage, when, as a matter of fact, I have not the slightest idea of using the omnibus; I am told it is the custom in Switzerland to put this charge on one's bill and trust to chance that he will either use the omnibus or will not see the overcharge in time to have it taken off—a mere dishonesty. I have paid this extortionate bill without a murmur. I have paid two francs every day for some rolls and tea, and I am told this excessive charge was made for the extra trouble of serving me in my room. In short, I am charged on this bill at every turn for service and extra service. It has been so in every hotel in Switzerland, and, up to this moment, nobody has heard me complain. I have never even complained when a sullen and lazy porter regularly failed to brush my clothes and polish my shoes, nor when an unobliging chambermaid failed to answer my bell or to supply me with any of the comforts which it is her duty to supply, and for which I am charged in my bill. But when, having paid an excessive bill, in which I am charged for service and extra service; and when, in spite of all that, I find myself surrounded at my departure by the same servants who have neglected me, and who would none the less bully me into paying them extra tolls; and worse even than this, when I find my trunk and valise marked with secret words and signs, by means of which an impudent *concierge* in one hotel may indicate to his colleague in another that I am to be imposed upon because I have not paid

"An unobliging chambermaid."

tribute; and, I repeat, when I find myself invariably surrounded at my departure by a horde of menials assembled together for the purpose of bullying or shaming me into giving them unearned and undeserved gratuities—in the presence of these outrages and impositions, I say, I cannot be silent.

"I find this a good occasion to speak, and I want to say to all of you assembled here, and through you to your associates and colleagues throughout Switzerland, that I regard you as a mere band of sharpers and scoundrels"—and my old friend's voice trembled as he added—"and your employer, who thus permits you to annoy and impose upon an unoffending guest is not much better than you are. For six weeks I have been the victim of your conspiracy, and until this day I have made no complaint; but when that person there" (pointing to the *concierge*) "told me this morning what the marks on my baggage signified, and when I found that those same marks had been slyly renewed in this very hotel, I made up my mind to tell you what I think of you. You are a set of cunning rascals, a lot of scheming knaves, a mere band of rogues, who in any first-class hotel in the United States would be kicked down the steps at the first attempt to impose upon a guest as you are now trying to impose upon me. And you, sir" (turning sternly upon the astounded proprietor), "if it is your fault that a guest of your hotel may thus be annoyed and bullied and branded; if it is because you do not pay these rascals living wages that they thus seek to prey upon and outrage your clients, I say, in that event, that you are the biggest thief and scoundrel in the whole knavish lot."

Whereupon, my friend, with a satisfied and more or less triumphant air, strode on past the astounded domestics and the dumbfounded proprietor, and, seating himself with dignity in his *fiacre*, drove gallantly away to the railway station.

But again he had reckoned without his host, for an hour later, just as he was about to board the belated express for Geneva, two *agents de police*, with sabres and cocked hats, came, panting, upon the scène and took him into custody. They could speak no word of English, and he as little of French. Thus he could not be made to understand why he was bustled off in a landau to prison, but he coupled his arrest with the Hôtel du Beau-Jardin, and feared that some terrible and false accusation had been made against him. I received a telegram from him that night. It urged me to come at once, in my official capacity, to his assistance. American consuls do not always rush for the first train when their excited fellow-countrymen in foreign lands call upon them to do so, but in this instance I knew that I was really needed. Henry Harrison Sprague is not the sort of a man to have called upon me otherwise. I caught the first train for V——, and arrived there about one o'clock in the morning, too late to be admitted to the prison, but not too late to find out from the Commissioner of Police, whom I knew very well, the nature of the charge against my friend. He was accused of violating paragraph 3 of section 4,912 of the Code, in having inflicted an *injure grave* upon the proprietor, the *maître d'hôtel*, the *concierge*, the *femme de chambre*, and other employés of the Grand Hôtel du Beau-Jardin by publicly and criminally libeling them, with malicious intent. I found that the offense was punishable by a fine of not less than fifty and not more than 5,000 francs, and by imprisonment in the communal jail for a period not greater than two years.

"Marking the baggage."

The next day, after the brief *instruction*, or examining trial, which is always conducted in private, my friend was remanded to the Correctional Court for trial. I secured a very clever lawyer—one Monsieur Gustav de Stoutz—and gave bond for Mr. Sprague's appearance on the tenth day of the succeeding month, and the case finally came on for trial on the tenth day of September, 1898, the very day on which the poor Empress of Austria was assassinated in Geneva. The little courtroom was crowded with the servants and guests of the several hotels of V——, and when the three judges constituting the Court of Correction appeared upon the bench, and when Monsieur the Procurer-General read the indictment, and when my old friend (for whom I was permitted to act as interpreter) was ordered to stand up and make his plea, I felt as if Henry Harrison Sprague was in hotter water than he thought.

In answer to the various interrogatories that were put to him by the President of the Court, he stated that the thing which had offended him most was the marking of his baggage with secret words and signs, thus sending him labeled and branded about the country, to be discriminated against and imposed upon. The trunk and valise were introduced in evidence with the objectionable writings still upon them.

The prosecuting witnesses testified in rapid succession, and the facts of the denunciation were well established.

The feature of the trial that interested me most was the testimony of the *femme de chambre* Antoinette Delmot. It was the simplest, and withal the most effective defense of the *pourboire* system I have heard, and as it produced in this instance a most unexpected result, I give it in full:

"I am thirty-five years of age," said Antoinette Delmot, "and I have been employed as a chambermaid in various hotels since I was seventeen."

"What wages are you paid?"

"Fifteen francs a month and my board."

"Have you any one to support except yourself?"

"Yes, Monsieur le President. I have my mother and my blind sister."

"Do you do this on a wage of fifteen francs a month?" asked the Procurer-General.

"*Hélas!* Monsieur must know that I do not," answered the witness. "It is only through the aid of the *pourboires* that one manages to make the ends meet. One tries to be amiable and quick in the service, and when one has served the guest well, one hopes for the *pourboire*. It seems to me that this is but natural. Monsieur claims that he paid the hotel, and consequently he must not reward the poor domestic who none the less smiles when she is unhappy, and comes quickly when she is tired. And *Mon Dieu!* monsieur does not consider that one must buy one's clothes, and that when one serves the *chic monde* in a great hotel one cannot dress in the garb of a peasant. Monsieur thinks he has paid all when he pays the proprietor. *Ma foi*, it is not for the proprietor that one smiles. One *works* for the proprietor; one *smiles* for the visitor who appreciates his hot water and his clean towels, and who at the *départ* says in a cheery voice, '*Voilà!* my good Antoinette,' and slips a franc or mayhap an *écu* into one hand; or if he be not so rich, and gives but ten *sous* and a kind word, one is pleased and says, '*C'est un brave homme quand-même.*'"

"And monsieur the accused gave nothing?" interpolated the Procurer-General.

"*Mais non!* Monsieur even left calling us all thieves—we who are as honest as he."

"But were you amiable for monsieur? Did you serve him graciously and promptly?" asked the attorney for the prisoner.

"*Two agents de police, with sabres and cocked hats, came, panting, upon the scene.*"

". . . the three judges constituting the court of correction appeared upon the bench."

"*Ma foi*," answered Antoinette Delmot, with a slight shrug, "who shall say?

"It was told to us that monsieur looked with contempt upon the domestics and scorned to give them the slightest recognition. Monsieur will not deny that he found clean sheets upon his bed and cold water for the *cuvette*, and clean towels—once a day—on the *lavabo*. This is the work which the proprietor pays one to do. Shall I say I came with enthusiasm when monsieur rang his bell? *Mais non!* haste was the extra service which I knew monsieur would not appreciate. Shall I say that I smiled sweetly upon monsieur when he ordered me to bring hot water? *Hélas!* monsieur had the air so *faché* that one also felt *triste* merely at seeing him! *Ma foi*, let us be honest! No—I did not smile. I did not rush with the hot water. I did not look for dust on monsieur's clothes. I did not scold Jean the porter because he failed to polish monsieur's boots. That you see is the delicate attention, the *bonne volonté*, which only the *pourboire* inspires. Monsieur gives no *pourboire*. *Bien.* Antoinette develops no *bonne volonté* in the serving! *Que voulez-vous?* Monsieur may be right in the principle. He pays the hotel proprietor for everything, *service compris*. *Mais, mon Dieu!* monsieur forgets that one is human. One does just so much work for the proprietor. When one adds the frills, one turns to the guest for the reward. Oh, yes. I admit that one expects the *pourboire*. If one were paid a hundred francs a month instead of fifteen, one would still expect it, *vous savez?* But *ce monsieur* he does not give it. *Tant pis pour nous.*"

"And yet, knowing this to be the case, you none the less joined with your colleagues in demanding it?"

"*Pardon*, Monsieur le President; one demanded nothing. One merely assembled at the *départ*. This is the custom of the country. One cannot change it. I do not wish to be impertinent, but if monsieur cannot do as others do when he comes to Switzerland, why does he not stay at home? *Parbleu!* When one is in Rome, one does as the Romans do, is it not?"

"I think I have heard that proverb before; the witness is inclined to be over-talkative," dryly observed the attorney for the accused.

"It is none the less true," remarked Antionette Delmot sagely as she withdrew from the witness box.

The *concierge*, upon being examined as a witness, reluctantly admitted that the words "*fédéral*" and "*communal*" belonged to a code, and that they indicated that the owner of the baggage was not a generous person in his treatment of hotel servants; but he denied the existence of a conspiracy to bully and bleed the accused.

The proprietor of the hotel testified that he paid his servants all he could afford to pay them. As to the *pourboire* system, he declared that the hotel proprietors of Switzerland had frequently discussed the advisability of trying to do away with it, but they had never reached the conclusion that it would be possible to do so. He cited the fact that the proprietors of several of the most important hotels in Switzerland, notably a famous one at Lucerne and another at the Falls of the Rhine, had posted notices in the bedrooms of their hotels, stating that their servants were generously paid and that the giving of gratuities was forbidden; but that the guests had none the less continued to give them and the servants to expect them.

"But," interrupted the attorney for the accused, "do you consider it right to let your servants form themselves into an organized band and boldly demand booty of the departing guest?"

"*Parbleu!*" answered the proprietor. "Nowadays one's servants do not always

"'Shall I say that I smiled sweetly upon monsieur when he ordered me to bring hot water?'"

ask one's consent. It is the custom to give *pourboire*, and it is the custom to expect it. If I go to the hotel of my neighbor, I must smile upon his servants and give them money. I would not dare do otherwise; *voilà tout*."

Brilliant arguments were made by the Procurer-General and by the attorney for my friend.

The Procurer-General held that the accused was a stranger who had come into a foreign country and had been kindly received. After eulogizing on this point, he closed by saying that this indiscreet foreigner must remember that this is Switzerland, where all men are free and equal; he had come here with his wealth and his arrogance, and had felt himself licensed to insult and injure these poor, hard-working, but none the less self respecting servants, and he must be punished. The Court must make an example of him, and teach him not only discretion and generosity, but good manners.

My friend's attorney made a strong and vigorous appeal in defense of his action, beginning by pointing to the proud and haughty *maître d'hôtel*. "My brother, the Procurer-General," said he, "has just referred to this person as a 'poor, down-trodden, humiliated hotel servant.' *Hélas*, what a comedy! Does he not fairly reek with contentment and prosperity? Observe that luxurious double chin; note the voluptuous waist. Does he not reek, I say, with impertinence and self-complacence? If my client could but speak our language he would tell you how this haughty monarch of the dining-room caused him to be served impossible beef and gum-elastic fowls, and how he was otherwise imposed upon and discriminated against." He took the ground that the American had been the victim of a conspiracy, and skillfully playing on the fact that the accused was from a sister republic whose traveling citizens brought much wealth to Switzerland, called for an immediate acquittal.

The President of the Tribunal, after a brief consultation with his two associates, announced the decision of the Court as follows:

"We find that the prisoner acted with great indiscretion in his denunciation of the prosecuting witnesses, but we also find that he had great provocation. If he did not wish to give gratuities to hotel servants it was his right not to do so. On the other hand, it was the right of the servants to expect these gratuities since it is the custom of the country to give them; but before they may rightfully ask them they must give prompt and willing service, which it appears in this instance they did not do. Thus they had no right to assemble themselves together upon the departure of the prisoner, to claim unearned gratuities; nor had the prisoner any right to address them in such harsh and libelous terms as he did. But we repeat that he had much provocation. The marking of his baggage with the secret symbols of a private society was an outrageous and illegal act. We feel therefore great sympathy for the accused, and we have unanimously decided to acquit him. In doing so, however, we cannot refrain from advising him to take to heart the testimony of Antoinette Delmot, the *femme de chambre* who has testified here; when he finds himself in a foreign country let him follow the custom of the country. We all expect our *pourboire* in this world in one way or another; we rebel against exactions, but the bit of *pourboire* bestowed with a friendly smile does much to oil the hinges in every walk of life. The accused is acquitted."

"The proprietor testified that he paid his servants all he could afford to pay them."

Thus ended the great *pourboire* case,

which has become classical in Swiss hotel circles. Did I say ended? Stay, not yet. Before the judges had left the bench, my old friend, who was much touched by the decision, which I had translated to him word for word as it was pronounced, directed me to say a few words in his name, which the Court gave me permission to do.

This is what I said:

"The accused begs you, Monsieur le President and your honorable colleagues, to accept his thanks for the kindness, wisdom, and justice of your decision. He wishes to admit that he spoke too strongly in applying such terms as 'thieves' and 'knaves' to the servants of the Hôtel du Beau-Jardin, and he hereby publicly retracts those particular epithets. But above all else he would like you to know that he stands before you a convert. He sees that he has been not only unwise, but unreasonable, in trying to enforce his transatlantic ideas upon the people of another country. He wishes you to know that he yields to the custom of the Continent, and will hereafter bestow the usual *pourboires* judiciously, and he hopes generously, and he begins by asking Antoinette Delmot to accept this Swiss banknote of fifty francs as a reward for the lesson she has taught him to-day."

The applause that burst out from every corner of that little Swiss courtroom is still ringing in my ears, and I am sure the President of the Court was not sincere in his effort to suppress it.

And the sequel of it all was that he who had been "*le cochon*" came to be known throughout Continental hotel circles as "*le Prince Américain*." He subsequently confessed to me one day that he never knew what real happiness was until he began to give *pourboire*.

IS THE AIRSHIP COMING?

By Professor Simon Newcomb, Ph.D., LL.D.

THAT depends, first of all, on whether we are to make the requisite scientific discoveries. To do this we must penetrate a field of thought which Nature has hitherto held sacred from the tread of the most adventurous scientific explorer. What the human mind has been able to grasp belongs to a middle class of things between the infinitely great and the infinitely small. The universe made known to us by the telescope requires so many eons to go through a single stage of its growth that its origin and destiny are alike incomprehensible to a being who can observe it but for a few fleeting years. Its vastness defies comprehension and eludes investigation. The microscope has made known to us how active and busy a world may be bounded by the surface of a single drop of water, in whose crystal purity the unaided eye cannot distinguish a speck. But the power of the microscope has a limit set by the very nature of light itself. Far below that limit, within a single cell so minute as almost to elude vision, even with the most powerful microscope, are the myriad molecules of matter. We have evidence that a single one of these, so minute that its individual existence could never be made known to us by any process whatever, is a mechanism whose complexity evades description,—a seat of activity going through cycles of change millions of times in the millionth of a second.

Between these extremes lie two connecting links,—invisible bonds, making known their existence to our universal experience, and yet evading investigation, as do the infinitely great and the infinitely small. They are the luminiferous ether and the force of gravitation. The former, invisible and imperceptible as the optic nerve is imperceptible to its own sight, fills all space. And yet, its minutest parts are susceptible to the vibrations of light which number hundreds of millions of millions in a single second and are propagated with such speed as to fly to the moon in two beats of the clock. Gravitation binds every separate molecule of matter on the earth to every molecule on the planets and every molecule in the most distant star. Yet up to the present time the profoundest philosopher knows no more about its why and wherefore, if why and wherefore it has, than the child that knows it will fall to the ground if its foot slips.

It goes without saying that the science of to-day is not satisfied to accept any of these limitations longer than it is forced to do so. It is battering at every gate which Nature has closed against the entrance of its forces. Well knowing that the eye of man is never to see a molecule of matter, it is nevertheless investigating the phenomena associated with it, determined, if possible, to penetrate the mystery of its constitution. It is seeking to discover the cause of gravitation, the force which, coextensive with ether itself, may be in close association with it. From time to time philosophers fancy the road open to success, yet nothing that can be practically called success has yet been reached or even approached. When it is reached,—when we are able to state exactly why matter gravitates, then will arise the question how this hitherto unchangeable force may be controlled and regulated. With this question answered the problem of the interaction between ether and matter may be solved. That interaction goes on between ethers and molecules is shown by the radiation of heat by all bodies. When the molecules are combined into a mass, this interaction ceases, so that the lightest objects fly through the ether without resistance. Why is this? Why does ether act on the molecule and not the mass? When we can produce the latter, and when the mutual action can be controlled, then may gravitation be overcome and then may men build, not merely airships, but ships which shall fly above the air, and transport their passengers from continent to continent with the speed of the celestial motions.

The first question suggested to the reader by these considerations is whether any such result is possible; whether it is within the power of man to discover the nature of luminiferous ether and the cause of gravitation. To this the profoundest philosopher can only answer, "I do not know." Quite possibly the gates at which he is beating are, in the very nature of things, incapable of being opened. It may be that the mind of

man is incapable of grasping the secrets within them. The question has even occurred to me whether, if a being of such supernatural power as to understand the operations going on in a molecule of matter or in a current of electricity as we understand the operations of a steam engine should essay to explain them to us, he would meet with any more success than we should in explaining to a fish the engines of a ship which so rudely invades its domain. As was remarked by William K. Clifford, perhaps the clearest spirit that has ever studied such problems, it is possible that the laws of geometry for spaces infinitely small may be so different from those of larger spaces that we must necessarily be unable to conceive them.

Let us now take up the question from a more immediately practical point of view. Can we decide whether the airship is or is not possible simply as a triumph of invention, unaided by any such revolutionary discovery as that we have suggested? If I should answer no, I should be at once charged with setting limits to the powers of invention, and have held before my eyes, as a warning example, the names of more than one philosopher who has declared things impossible which were afterward brought to pass. Instead of answering yes or no, I shall ask the reader to bear with me while I point out some general features of the progress of science and invention.

Invention and discovery have, notwithstanding their seemingly wide extent, gone on in rather narrower lines than is commonly supposed. If, a hundred years ago, the most sagacious of mortals had been told that before the nineteenth century closed the face of the earth would be changed, time and space almost annihilated, and communication between continents made more rapid and easy than it was between cities in his time; and if he had been asked to exercise his wildest imagination in depicting what might come—the airship and the flying machine would probably have had a prominent place in his scheme, but neither the steamship, the railway, the telegraph, nor the telephone would have been there. Probably not a single new agency which he could have imagined would be one that has come to pass.

For thousands of years mathematicians vainly grappled with three problems: to describe a square which should be equal in area to a given circle, to trisect an angle, to construct a cube having double the solid contents of a given cube. Vastly more complex problems had been solved, why should these evade their powers? When such advances in mathematical thought and methods were reached that the possibility of a solution could be inquired into, the answer was a negative one. That none of these problems could be solved was demonstrated by a process as rigorous, though not so accessible to the ordinary mind, as any proposition in Euclid. But this did not mean that mathematics had ceased to advance. The very demonstration of the impossibility was a triumph second only to what the solution itself would have been.

Great indeed have been the advances in our knowledge of the heavens. And yet, any inquirer can ask the astronomer questions to which he can only answer by avowing his ignorance. He has discovered revolving around the stars worlds which must remain forever invisible, even to the telescopic eye, and can tell what gases are bursting out from some blazing object in the most distant regions of the universe, as readily as a chemist can tell the composition of the most ordinary substance. And yet he remains dumb when asked about the surface of Jupiter, or called upon to tell the inquirer whether Mars is inhabited.

It is so with invention. The distinction between the possible and the impossible is not clear. A useful result may look entirely feasible on such consideration as we can give it, when, if we inquire into the case, we should see an absurdity in expecting it. Not many years ago the public was so much interested in the question of making it rain that Congress provided means to send a party all the way to Texas to see if rain could be brought down by bombarding the skies with dynamite bombs. The incredulous scientists who declared the attempt absurd were held up to ridicule by ardent spirits, while men of more caution held that the experiment was worthy of a trial, even if the chances of success were small.

Now, compare this problem with another, quite similar in principle. Every man who favored an attempt to bring down rain would have ridiculed a proposal to make it high tide in New York Harbor by blowing up the water with dynamite whenever a great ship had to go to sea. Why expect the one and not the other? The answer would be that the one attempt was simply ridiculous while the other was not. No hydrographer would ever be expected to change the course of the Gulf Stream, or to vary its temperature.

But it only needs a wide grasp of the subject to see that the problem of bringing to New York from some vaporous region an air current which shall deposit its moisture on an arid field is of the same kind as the problem of changing the Gulf Stream, or bringing a tidal wave into New York Harbor. Nor is it evident that to expect the air to condense its moisture without the necessary conditions being produced would be like expecting an engine to run without fuel.

No builder of air castles for the amusement and benefit of humanity could have failed to include a flying machine among the productions of his imagination. The desire to fly like a bird is inborn in our race, and we can no more be expected to abandon the idea than the ancient mathematician could have been expected to give up the problem of squaring the circle. The lesson which we draw from this general review of progress is that we cannot conclude that because the genius of the nineteenth century has opened up such wonders as it has, therefore the twentieth is to give us the airship. But even granting the abstract possibility of the flying machine or the airship, we are still met with the question of its usefulness as a means of international communication. It would, of course, be very pleasant for a Bostonian who wished to visit New York to take out his wings from the corner of his vestibule, mount them, and fly to the Metropolis. But it is hardly conceivable that he would get there any more quickly or cheaply than he now does by rail.

Another feature incidental to any aërial vehicle is very generally overlooked. In the absence of any such revolutionary discovery as I have pictured in the first part of this article—in the absence of the power to control gravitation—a flying machine could remain in the air only by the action of its machinery, and would fall to the ground like a wounded bird the moment any accident stopped it. With all the improvements that the genius of man has made in the steamship, the greatest and best ever constructed is liable now and then to meet with accident. When this happens she simply floats on the water until the damage is repaired, or help reaches her. Unless we are to suppose for the flying machine, in addition to everything else, an immunity from accident which no human experience leads us to believe possible, it would be liable to derangements of machinery, any one of which would be necessarily fatal. If an engine were necessary not only to propel a ship, but also to make her float—if, on the occasion of any accident she immediately went to the bottom with all on board—there would not, at the present day, be any such thing as steam navigation.

Let us look at the problem and see what room there is for the airship among the inventions of the future. If we are to have an aërial machine of any kind, it must be one of two principles. Either we must control the law of universal gravitation, as I have already suggested, or the machine must be supported by the air.

Only two systems of air-support seem possible, or have ever been suggested. The vehicle must either float in the air, like a balloon, or it must be supported by the action of the air on moving wings, like a bird when it flies. The conditions of both of these methods can be made the subject of exact investigation. A floating vehicle to carry a certain weight must have a bulk corresponding to the volume of air which shall have this weight. With this bulk it must experience a certain resistance to its passage through the air, which resistance increases at least as the square of the velocity. To overcome this resistance requires a corresponding power to be exerted by an engine of some kind. The engine has weight. The best combination of all these conditions is a problem of applied science, of which the solution depends mainly on the strength and weight of materials. Solve it as we will, our floating ship must have a thousand times the bulk of a railroad train carrying an equal weight, and experience a hundred times the resistance that the train does. It therefore seems quite evident that while the problem of a dirigible balloon may be within the power of inventive genius, we cannot hope that it will become a vehicle for carrying passengers and freight under ordinary conditions.

Now let us turn to the other alternative, that of the flying machine. If we can make a model of a bird with its wings, and set the wings in motion like those of a bird with no greater weight, the model will fly like a bird. To do this is, in a certain sense, a problem of nothing but applied mechanics. Yet it has its well-defined limitations. By experiments on the resistance of the air we can compute how large a wing or aëroplane, moving with a certain speed, will be required to support a given weight. We can also determine, or, at least, form some idea of, the power of the engine that will move the apparatus. There must be connecting machinery, by which the engine shall in some

way act on the plane. Engine, machinery, and plane must all have a weight proportioned to, or at least increasing with, their size and efficiency. It is then a problem of strength of materials to form a combination in which the ratio of efficiency to weight will be enough to make the machine fly.

In studying the best combination, we meet two difficulties, one of which can be stated in a very simple mathematical form. Let us make two flying machines exactly alike, only make one on double the scale of the other in all its dimensions. We all know that the volume, and therefore the weight of two similar bodies are proportional to the cubes of their dimensions. The cube of two is eight. Hence the large machine will have eight times the weight of the other. But surfaces are as the squares of the dimensions. The square of two is four. The heavier machine will therefore expose only four times the wing surface to the air, and so will have a distinct disadvantage in the ratio of efficiency to weight.

Mechanical principles show that the steam pressures which the engines would bear would be the same, and that the larger engine, though it would have more than four times the horse power of the other, would have less than eight times. The larger of the two machines would therefore be at a disadvantage, which could be overcome only by reducing the thickness of its parts, especially of its wings, to that of the other machine. Then we should lose in strength. It follows that the smaller the machine the greater its advantage, and the smallest possible flying machine will be the first one to be successful.

We see the principle of the cube exemplified in the animal kingdom. The agile flea, the nimble ant, the swift-footed greyhound, and the unwieldy elephant form a series of which the next term would be an animal tottering under its own weight, if able to stand or move at all. The kingdom of flying animals shows a similar gradation. The most numerous fliers are little insects, and the rising series stops with the condor, which, though having much less weight than a man, is said to fly with difficulty when gorged with food.

We have also to consider the advantage which a muscle has over any motor yet discovered, in regard to its flexibility and the versatility of its application. It expands and contracts, pulls and pushes, in a way that no substance yet discovered can be made to do. It is also instantly responsive to a brain which cannot of itself act on external matter.

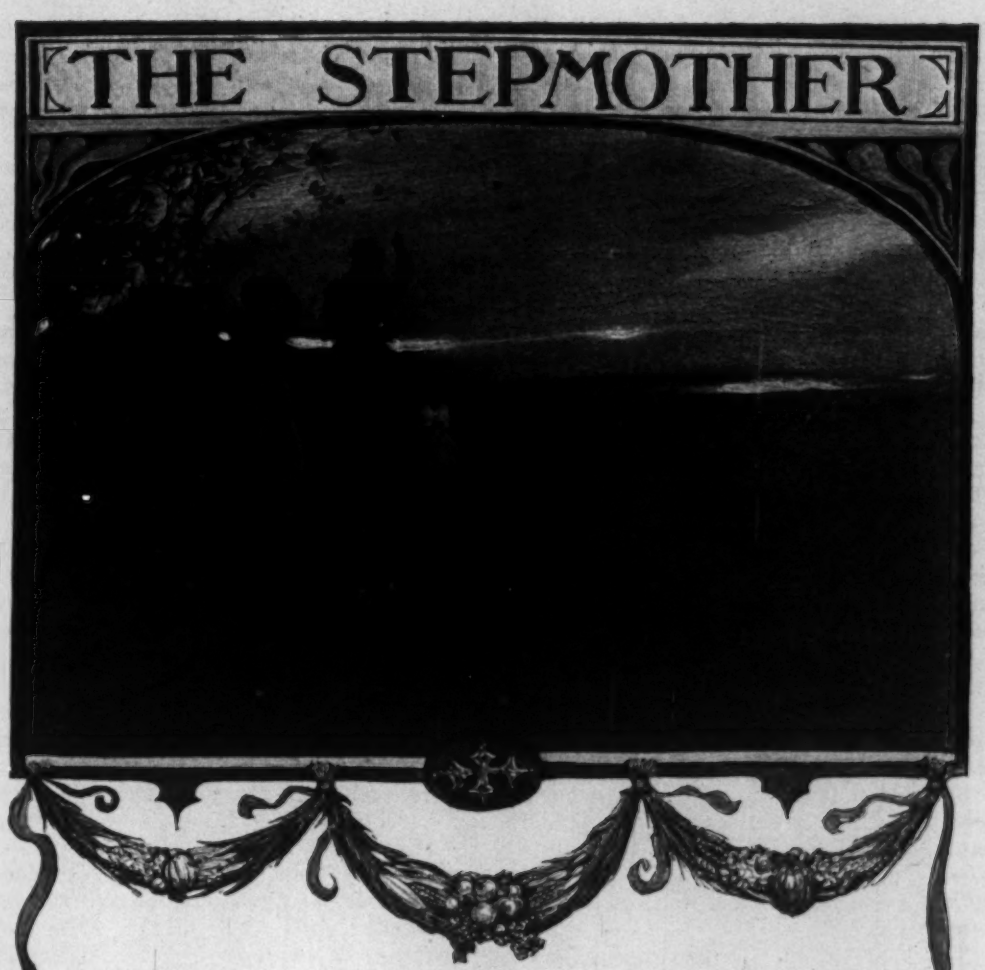
We may now see the kernel of the difficulty. If we had a metal so rigid, and at the same time so light, that a sheet of it twenty meters square and a millimeter thick would be as stiff as a board and would not weigh more than a ton, and, at the same time, so strong that a powerful engine could be built of it with little weight, we might hope for a flying machine that would carry a man. But as the case stands, the first successful flyer will be the handiwork of a watchmaker, and will carry nothing heavier than an insect. When this is constructed, we shall be able to see whether one a little larger is possible.

The cheapness of modern transportation is another element in the case frequently overlooked. I believe the principal part of the resistance which a limited express train meets is the resistance of the air. This would be as great for an airship as for a train. An important fraction of the cost of transporting goods from Chicago to London is that of getting them into vehicles, whether cars or ships, and getting them out again. The cost of sending a pair of shoes from a shop in New York to the residence of the wearer is, if I mistake not, much greater than the mere cost of transporting it across the Atlantic. I have shown that the construction of an aërial vehicle which could carry even a single man from place to place at pleasure requires the discovery of some new metal or some new force. Even with such a discovery, we could not expect one to do more than carry its owner.

Perhaps the main point I have tried to enforce in this paper is this—the very common and optimistic reply to objections, "We have seen many wonders, therefore nothing is impossible," is not a sound inference from experience when applied to a wonder long sought and never found. I have shown that the obvious and long-studied problems are not those that have been solved. The experience of the past leads us to believe that the progress of the twentieth century will be along lines that no one can anticipate, and will lead to results which, if a prophet could describe, might strike us as more surprising than the airship.

"'DAN, WHAT WOULD WE ALL DO WITHOUT YOU?'"

THE STEPMOTHER



By Kate M. Cleary.

The world is filled with folly and sin,
And love must cling where it can, I say,
For beauty is easy enough to win—
But one isn't loved every day!
—*Owen Meredith.*

"YOU are going in town to the Memorial services, Dan?" questioned the woman. Her voice was appealing.

The young fellow standing in the doorway shifted his position impatiently. He was twenty-three, tall and brawny. Years of labor on the farm had developed his limbs and toughened his muscles. Later in life he would be stooped and shambling, as are those who follow the plow and guide the harrow after the days of youthful manhood have passed. Now he was straight and stately, and the colossal symmetry of his frame was good to look upon. His cotton shirt, falling loose at the neck, revealed a triangle of sunburnt skin. His low-browed, strong-featured face was copper-red also. The jaw was heavy—the chin square. The blue eyes he turned on the woman had the sullenness of one who expects opposition.

"Yes. I'm a-goin'."

"In the new buggy?"

He nodded. There was a silence which she waited wistfully for him to break. As he said nothing, she picked up the sewing which lay in her lap.

"I was hoping I could get to go," she said, speaking in the plaintive monotone produced by colorless years of self-repression and self-denial. "I've been every time when I could take or leave the children.

It's a year since I've been to town." Her needle was suspended. She looked afar over the boundless expanse of prairie with weary eyes. "My father and brother are buried on the hill there. Little Ruby—she's there, too. She died when she wasn't but eight. She was the greatest child for flowers! The weeds even were flowers to her. I guess she'd know if there were some put on her grave."

Again there was silence, she sending him eager, furtive glances; he staring out where an ocean of oats tossed turbulently in the glaring sunshine.

"Even if the celebration brings sad thoughts," she went on, "it's kind of cheerful, too. There's so many folks in town. There's the flags—and the music. The girls have new hats and dresses. It's sociable-like. There hasn't been a soul to this house since Christmas. Then it was only some campers whose wagon broke down. But it seemed good to see them, even."

"Look here, mother," he broke out. "I know you ain't got much pleasure. I'd like you could fix to go. But as for me drivin' you in—well, I promised to take Chastina Marks."

She said nothing, but the look that quivered out on her face made him set his teeth hard for an instant. Then, with a scarlet blotch burning on either thin cheek, she took up her sewing again, and went on stitching—stitching.

The home of the Carneys was a forlorn place. There was no timber in that region. The small, shabby house perched upon the bluff was exposed to the bitter winds of winter and to the almost more malignant furnace blasts of summer. It was nineteen years since Oliver Carney had married for the second time. Then, he and his two sturdy boys had sadly needed the ministrations of a woman. The girl he married was young and romantic. She pitied him. She mistook her exquisite sympathy for the divine passion itself. When he traded his business in the East for a rocky Nebraska farm, and went to live where his lack of experience and the capricious climatic conditions together conspired against him, the outcome was despondency and futile regret. He not only failed to do one thing well; he succeeded in doing many things ill. He credited Fate with peculiar perversity toward himself—with an almost personal antagonism. Dyspepsia, that grim demon evoked by farm-house viands, became a constant torment. Insomnia duly followed. Pessimism, the prompt hand-maid of these, waited upon them. So he became gloomy and unreasonable, except when his depression was temporarily merged in the maudlin amiability of liquor.

It was upon the woman, however, that the burdens of failure pressed most heavily. She had been a brave and gallant young creature, but the cowardice and shirking selfishness of the man she married ate into the core of her being like an acid.

None knew better than she that work from long before light on winter morns, and from the first streak of pearl in summer skies, was hard. She knew that poverty was a rabid, a relentless thing. She knew that it made petty those who would be great and generous; that it fettered hands which would fain be extended in royal generosity; that none might scale its ramparts which barred out possible ambitions—pleasures—joys! But these she accepted—the poverty and the toil. At the melancholy of inertia surrounding her she rebelled. She dreaded its contagion. She refused to have her heritage of hope wrested from her. She would not live in an atmosphere of rayless foreboding. She denied the right of one man to condemn her to profound and enduring discontent. She was not one of those who succumb to adversity willingly. So she made a hard fight. Occasionally she conquered—less frequently as the years went by. The struggle told on her. She lost expectancy of expression and elasticity of step. Child-bearing and child-rearing were part of her handicapped existence.

Now a fresh fear had arisen. What if Dan were to marry—Dan, upon whom they all depended, rather than upon the moping, misanthropic father!

"Dan!" Her voice sounded strange to herself, and she waited until she could speak as usual. "Dan, what would we all do without you?"

She had been a school teacher in her youth, and she spoke with a correctness and a precision which, although marred by occasional idioms, still distinguished her speech from the lingual slovenliness of the Western farm woman.

"Oh, I guess you'd git along!" A dull, slow color had crept into his face. "It's goin' to be a good year. Dick could take my place."

Dick—take—his place! He was thinking, then—he was going to——

"We—we can't depend on Dick!" she murmured. A vision of Dick rose before her

—gay, pleasure-loving, inconsiderate Dick! She smiled—a sad smile. "I didn't think Chastina was the kind of girl you'd take a fancy to, Dan."

He swung around.

"What," he demanded, "have you got agin her?"

Her work fell on her lap. She clasped her thin, knobby-jointed hands upon it, and looked up at her stepson. She was a frail little body, gowned in the everlasting print wrapper of the prairie housekeeper. Her large hazel eyes were bright—too bright. She breathed quickly. She had lost two of her front teeth. To have them replaced would be an extravagance not to be considered. Frequently when speaking she lifted her hand with a nervous gesture and covered her mouth.

"She's frivolous, Dan. She likes admiration—and pretty clothes——"

"Is that all? What girl don't, mother?"

"It seems to me," she went on hurriedly, "that your—your marriage to her would be a—a mistake! Think it over a bit——"

"Think it over!" he burst out. "Mother, you didn't use to want to stand in my way! Don't you s'pose I have thought it over? Do you think I'm goin' to be dray horse for all's here—two of 'em as well able to work as me—all the born days of my hull life?"

The hot May sun streamed down on him. She could see his great chest rising and falling, and the muscles of his arms working under the worn sleeves of his shirt.

"You have more than your share of the work!" she admitted. Her voice failed her again. A stray sunbeam glinted on her needle—an idle needle just then. "And—I don't want to stand in your way, Dan. Only—you've always seemed like my boy—the only boy I ever had! Maybe I'm saying this to you about Tina because—because I want to keep you." Her hungry eyes never left his face. "Perhaps I'm—I'm just making excuses. Perhaps——"

The scarlet blotches faded in her cheeks. She picked up her sewing again, but the hands trembled over the coarse cotton cloth.

". . . STITCHING INTO DAN'S DENIM SHIRT REBELLION, REGRET, RESENTMENT—LOVE."

She could not ply the glittering little implement she held. Suddenly she went deathly pale. She lay back, drawing her breath in short, soft gasps.

"Mother!" cried the young fellow. "Mother!"

"It's nothing," she panted. "Nothing."

But her lips took on a bluish tinge, and after a faint shiver she lay quite still. He dashed out to the well for water, brought it to her, forced her to swallow it. He watched her anxiously, all his sullenness gone, as she shuddered back to consciousness.

"I didn't mean to rile you, mother," he said. "But seems like I couldn't bear to have you comin' between Chastina an' me."

He had dropped on one knee beside her chair in a bewilderment of dumb and clumsy penitence.

"I know it's hard for you," she murmured. "You are young—and it's hard for you."

The tired tears were slipping down her cheeks.

"It ain't dead easy for you, mother."

"Oh, don't think of me!"

"We don't. We've got out of the way of thinking of you."

Her little skinny arm lay near him. It never occurred to him to give it a gentle touch. They are chary of caresses—the prairie people. Perfunctory kisses are given at the marriage feast or before the burial—but even these are few and far between. He stumbled to his feet, ashamed of the compassionate impulse which had temporarily mastered him. The woman rose, too.

"It's time to get supper," she said. "They'll be in soon."

But as she crossed the kitchen to set her work aside she suddenly put her hand to her breast—stood still.

One stride and Dan was beside her.

"You're not forgittin' what the doctor said?" he questioned. "That if you got scairt—or—or hurt, an' had another heart spell you was like—like to——"

She flashed around on him. Suddenly her face was young, yearning, eager.

"Oh," she cried breathlessly, "oh, I *was* forgetting! Do you think—" But as suddenly as it had come the brilliance waned. She shook her head. "No—I shall not die—not soon," she said.

She went on filling the little rust-red stove with cobs. Dan did not offer to assist her. The attitude of a young Western farmer to his mother is that of an Indian to his squaw. All domestic drudgery properly pertains to her.

"I'll go out an' take a look at the young peach trees," he said. "They're comin' on fine. This'll be the second year of bearin'. There ought be enough made out'n 'em to pay dad for the hogs the cholery got."

"What you talkin' about?" rasped a dolorous voice. "Them peaches? They'll be some, maybe. But the nursery man fooled me on the settin's. He didn't give me the Baltimore beauties I bought off'n him—on'y the common kind. An' the common kind is dreadful plenty. It's the best that fetches the price. Every one's again me. Every one cheats me. I allus had the worst luck of any one I ever knowed."

He sank into the only comfortable chair the room afforded, a limp heap of inactive humanity. He watched the woman preparing supper.

"There's them," he announced placidly, arousing himself from a trance of indolent content.

"Them" came tumbling in, a riotous, roystering, healthy brood. They laughed, and mocked, and fought, and burst into peals of laughter. The head of the house regarded them with bland interest.

"Seems like," he remarked, "I ain't never so happy as when I a-sittin', so to speak, in the bosom of my fambly."

His conciliatory manner was one to incite distrust. His wife sent him a swift glance.

"Have you been to town?" she asked.

He declared that he had not been to town. That even if he had she knew better than to suppose that he would go into the Owl-King—or near the Owl-King, or——

Dick, perfumed, pomaded, and in his Sunday best, came clattering down the ladder-like stairway.

"Hurry up, mother. I'm goin' in town to a strawberry festival at the Methodist Church. Here, Dolly, you got your supper. You let me set there."

Dolly protested with a howl. Dick picked her up and deposited her on the floor, where she appeared to shrink together like a collapsible drinking cup.

When Dan came in from his aimless tramp through the orchard the owner of the farm was sunk in stertorous oblivion. The last child had been tucked in bed. The last utensil had been washed and set aside. And the woman, sitting by the kitchen table, in the dull light of the kerosene lamp, was sewing, stitching into Dan's denim shirt rebellion, regret, resentment—love. That one unselfish love of all loves!

Chastina Marks was waiting for Dan when he drove up. She was a slender, brown-haired girl, clad in the inevitable white lawn and fluttering ribbons of the prairie belle. She was not pretty, but she was charming. There was a fresh wholesomeness about her as pleasant as the scent of wild-plum blossoms. Her quiet eyes held a look of reserve. They were eyes which might, indeed,

> Keep back a daring lover,
> Or comfort a grieving child.

"I'm late." He had jumped down and was helping her into the buggy. "It's a fine morning, but I'm afraid it's going to blow up a bit."

She looked away to the horizon with the keen and prescient vision of those who are prairie-born

"It will be a dust storm, I think."

The little town presented its usual Memorial Day appearance, which was that of festivity—festivity, however, the most seemly and decorous. But—as Dan's stepmother had remarked—the flags, flowers, music, the groups promenading in their finest attire, the uniforms of the band of bent veterans, the gold-lettered badges of the Women's Relief Corps, the importance and celerity of the few officials on horseback, the forming of the parade, the deliberate progress to the church, the singing, the speeches, even the bulging baskets in the back of the wagons, were "sociable-like."

Dan enjoyed neither the day nor the propinquity of the girl he loved. His brow was contracted. He spoke seldom. His companion wondered—silently. She was wise enough to know that to question a secretive man is to invoke a lie.

The dust storm she had prophesied did come. At first there was only the most infantile,—the most ineffectual little breeze. Then tiny spirals of dust rose in the country roads. Suddenly the tawny spirals were as tall as waterspouts. The increasing wind, bellowing up from Kansas, blew the dust into a curtain—a wall—an encompassing, enveloping fog. Dan, urging his horses homeward, tried to protect Chastina. He pulled up the buggy top. He drew the linen robe over her lap. He gave her his silk handkerchief to tie over her eyes. But the man does not live who can combat a Nebraska dust storm. The yellowish powder sifted in through the joints of the canopy. It stung the flesh like the bites of myriad infinitesimal insects. It grimed the lap-robe and the girl's white gown. It maddened the old farm horses until they were mettlesome as pastured colts. It pierced, and penetrated, and choked, and blinded. And all the time the wind sent the buggy careening, screeched in the ears of its occupants, and howled in its fury after each rare pause to take breath. All the time, too, the sun blazed down—a great blotch of deep orange seen through saffron clouds.

"I shan't let you out at your house," Dan shouted. "I'll take the short cut to our place. There is something I want to tell you."

The violence of the storm was spent when they turned into the narrow road that zigzagged towards the desolate house on the bluff. Dan slackened rein. At last he could make himself heard.

"Tina," he blurted out, "I asked you to marry me. I didn't know then—anyways I didn't think. But I s'posed we could git married this fall. Now—well, now we can't. I've thought it over good an' hard—an' we can't. I got to stick by mother awhile longer. Maybe this year—maybe all next, too. I don't s'pose now you'll want to keep comp'ny with me no longer. But," doggedly, "I got to stick by mother."

She turned her grave eyes on him. The illimitable love in them dazzled him. His heart plunged.

"I wouldn't think much of you," she said, "if you didn't stick by your mother after all she's done for you. My mother often told me before she died how strong and pretty Mis' Carney was when she first come out to Nebraska. She said how nice she kep' you an' Dick—always good clothes an' the best of everything for you, when she didn't have a stuff dress to her back. I'll wait for you, Dan."

"Tina!" he cried. "Tina!" he ventured again. But the pain in his throat precluded speech. He yelled to the horses. They forged ahead.

Suddenly Tina leaned forward—clutched his arm.

"Look, Dan, look! What's wrong? The children are running down the bluff. They're comin' this way. An' your father—he's beckonin'! There's Mis' Harrowsby—I know her cape—an' Mis' Peterson. Hurry—hurry!"

"Oh, my God!" muttered Dan.

The world seemed to reel away from him. Tina's hand steadied him. Tina's voice recalled him. All at once he was standing up—was lashing the horses.

"I wish I'd taken her!" the girl heard him cry. "I wish to God I'd taken her!

She wanted so to go in this Memorial Day!"

"Hush, Dan! Hush, dear! It will be all right!"

Some one was at the horses' heads. He hurled himself out of the buggy—was in the house.

"We don't know just how it happened," one of the whispering group in the kitchen was saying. "She was alone when the storm came up."

"She went out to drive the young calves under shelter," interposed another.

"A loose scantlin' struck her in the side," volunteered a third. "She ain't been real strong of late anyhow. That heart trouble's awful onreliable. The doctor? Can't git him. He's over in Kansas. Mis' Peterson knows well as him, though. She 'lows there ain't anythin' to be done."

Dan pushed by them into the little poor best bedroom. His stepmother lay in the pine bedstead. The patchwork quilt was drawn to her chin. He fell on his knees beside her. His head drooped on his clenched hands. His shoulders were heaving. She lifted one weak arm and laid it around his neck.

"Look at—me—Dan."

He lifted his haggard eyes to hers, which were sweet and luminous.

"Dan," went on the voice, which seemed to come from a distance, "I'm—I'm sorry for what I said—about Tina. She *is* dear—she *is* good—like her mother before her."

"Mother—she is here."

"Yes—I can see her now. I am glad—very glad. But—Dan."

A woman came in, insisting the sufferer should not speak. The work-worn hand was imperious then as any which ever swayed a scepter. At its light motion the intruder left the room.

"Dan—where are you? Listen!"

"I am listening, mother."

"Don't make Tina's life—too hard! Women are not fitted—to bear—as much as—men. They—must—bear—more. Men love women, only—they—don't understand. This is Memorial Day." Her hand found his rough head and rested there. "I hope you'll remember—every Memorial Day—about Tina. And that a woman isn't always—well—or happy—just because she keeps on her—feet—and doesn't—complain. And let her know—you——"

Grayness swept over her face like an obliterating billow.

"Mother!" he sobbed hoarsely. "Mother!"

The bed shook to the beat of his breast.

"Little Dan," she was saying softly. "No—I can't think he's my stepson. He's my boy." The hand on his head moved caressingly. "Such pretty—pretty curls! My boy—the only boy I ever had."

Then she was whispering about Ruby, the little sister who had died when she wasn't but eight. The little child who had loved all flowers—to whom the weeds were flowers.

RECOLLECTIONS OF LAWRENCE BARRETT.

By Clara Morris.*

THERE were few stars with whom I took greater pleasure in acting than with Mr. Lawrence Barrett. I sometimes wonder if, even now, the profession really knows what great reason it has to be proud of him. He was a man respected by all, admired by many, and if loved by but few, theirs was a love so profound and so tender that it amply sufficed.

We are a censorious people; and just as our greatest virtue is generosity in giving, so our greatest fault is the eagerness with which we seek out the mote in our neighbor's eye, without feeling the slightest desire for the removal of the beam in our own eye. Thus one finds that the first and clearest memory actors have of Mr. Barrett is of his irascible temper and a certain air of superiority; not of his erudition, of the high position he won socially as well as artistically, of the almost titanic struggle of his young manhood with adverse circumstances. Nor does that imply the slightest malice on their part. Actors have, as a family trait, a touch of childishness about them which they come by honestly enough. We all know that the farther we get from infancy the weaker the imagination grows. Now it is imagination that makes the man an actor, so it is not wonderful if, with the powerful creative fancy of childhood, he should also retain a touch of its petulance and self-consciousness. Thus to many actors Mr. Barrett's greatness is lost sight of in the memory of some dogmatic utterance or sharp reproval that wounded self-love.

It would seem like presumption for me to offer any word of praise for the artistic work of his later years; the world remembers it. The world knows, too, how high he climbed, how secure was his position; but twice I have heard the story of his earlier years—once from the lips of his wife, once from the lips of that beloved brother Joe, who was both his dread and sorrow—and at each telling my throat ached at the pain of it, while my nerves thrilled with admiration for such endurance, such splendid determination.

A paradox is, I believe, a statement seemingly absurd, yet true in fact. In that case, I was not so very far wrong, in spite of general laughter, when, after my first rehearsal with him, I termed Mr. Barrett a man of cold enthusiasm.

"But," one cried to me, "you stupid—that's a paradox! Don't you see your words contradict each other?"

"Well," I answered, with shamefaced obstinacy, "perhaps they do; but they are not contradicted by *him*. You all call him icy-cold, and I know he is truly enthusiastic over the possibilities of this play; so that makes what I call cold enthusiasm, however paradoxical it sounds."

And now, after all the years, I can approve the childish judgment. He was a man whose intellectual enthusiasm was backed by a cold determination that would never let him say "die" while he had breath in his body and a stage on which to rehearse.

Every one can recall Mr. Barrett's enormous brow, and how, beneath his great burning eyes, his cheeks suddenly hollowed in, thinning down to his sensitive mouth. I was on the stage in New Orleans, the first morning of my engagement there (I was under Mr. Daly's management, but he had loaned me for a fortnight), and I started out with, "Mr. Daly said to please ask Mr. —" away went the name—goodness gracious,—should I forget my own name next!

The stage-manager suggested, "Mr. Rogers?"

"No—oh, no! I mean Mr. —er—er," and I trailed off helplessly.

"Mr. Seymour?" offered a lady.

"No—no! that's not it!" I cried. "Why, goodness, mercy me! you all know whom I mean—the—the actor with the *hungry eyes!*"

"Oh, Barrett!" they shouted, all save one voice; that, with a mighty laugh, cried out, "That's my brother Larry, God bless him! No one could miss that description, for sure he looks as hungry to-day as ever he did when he was really hungry to his heart's core."

* Selections from Clara Morris's "Recollections of the Stage and its People" have appeared in McClure's Magazine for January, February, May, June, July, and August, 1901.

And so it was that I first met poor Joe Barrett, who worshiped the brother whose sore torment he was. For this great broad-shouldered, ruddy-faced fellow with the boyish laugh had ever in his veins the craving for liquor, that awful inherited appetite that can nullify prayer and break down the most fixed determination.

"Ah!" he said to me, "no one, no one can ever know how good Larry has been to me; for while he is fighting and struggling to rise, every little while some lapse of mine drags him back a bit. Yet he never casts me off, never disowns me. He has had to discharge me for the sake of discipline here, but he has reëngaged me. He has sent me away, but he has taken me back again. I promise, and fail to keep my promise. I fall, and he picks me up. Through the very mud I have dragged my brother; but the sweet Saviour could hardly forgive me more fully than Larry does, for, look you, he never forgets that I am the son of my father, who was accursed before me, while he is the son of our poor mother, blessed be her name! It isn't that I don't try. I keep straight until the agony of longing begins to turn into a mad desire to do bodily harm to—some one—*any one*, and then fearing the worst, I drink my fill and—and the papers find me out, and are not content to tell of the disgraceful condition of Joseph Barrett, but must add always, 'the brother of the prominent actor, Mr. Lawrence Barrett.' Poor Larry! Poor little sickly chap that he used to be, with his big brainy head, too heavy for his weak neck and frail body to carry."

And then he told me of their sorrowful life, of their hideous poverty. The idle father and his dislike for the delicate boy, whose only moment of happiness came when the weary mother returned from work, and, the poor supper over, she sat for a little to breathe and rest, and held his heavy head upon her loving breast, while Joe sang his songs or told of all the happenings of the day.

That happy Joe, who had no pride, and was quite as satisfied without a seat to his small trousers as with one! Then he told me how hard it was for Lawrence to learn, how he had to grind and grind at the simplest lesson, but once having acquired it, how it was his for life.

"Why, even now," said he, "in confidence I'm telling you my brother is studying like a little child at French, and it does seem that he cannot learn it. He works so desperately over it! A doctor has warned him he must choose between French and his many parts, or break down from overwork. But he will go on, hammering at his *parlez vous* until he learns it, or dies trying."

"If you were to live with your brother, might not that help to keep you strong?" I asked.

"Now, my dear little woman," he said, "Larry is human in some respects, if he is almost God-like toward me. Remember he has a young family now, and though his wife is as good as gold, and always patient with me, I am not the kind of example a man would care to place before his little ones; and as Lawrence is devoured with ambition for them, he rightly guards them from too close contact with the drag and curse of his own life, in whom he—and he alone—can see the sturdy, tow-headed brother of the old boyish days, who saved him from many and many a kick and thump his delicate body could ill have borne."

Joe told me of his dead wife—Viola Crocker that was, the niece of Mrs. Bowers and Mrs. Conway—of their happiness and their misery, describing himself as having been "in heaven or in hell, without any betwixts and betweens."

When Mr. Barrett stood second only to Mr. Booth in his profession, well established, well off, well dressed, polished and refined of manner—yes, and genial, too, to those he liked—I came by accident upon a most gracious act of his, and, following it up, found him deep in a conspiracy to deceive a stricken woman into receiving the aid her piteous determination to stand alone made it impossible to offer openly. I looked at the generous, prosperous, intellectual, intensely active gentleman, surrounded by the clever wife and the pretty, thoroughly educated daughters, who were chaperoned in all their walks to and from park or music lesson or shopping trip, and I wondered at the distance little "Larry," with the heavy head and frail body, had traveled, and bowed respectfully to such magnificent energy.

Even then there arose a cry from the profession that Mr. Barrett was dictatorial, that he assumed airs of superiority. Mr. Barrett was wrapped up soul and body in the proper production of the play in hand. He was keenly observant and he was sensitive. When an actor had his mind fixed upon a smoke or a glass of beer, and cared nothing whether the play failed or succeeded, so long as he got his "twenty dollars per," Mr. Barrett knew it, and be-

came "dictatorial" in his effort to force the man into doing his work properly. I worked with him, both as a nobody and as somebody, and I know that an honest effort to comprehend and carry out his wishes was recognized and appreciated.

Cold—hard—dictatorial—superior? Well, there is a weak, lean-on-somebody sort of woman who will love any man who will feed and shelter her—she doesn't count. But when a clear-minded, business-like, clever woman—a wife for many years—loves her husband with the tenderest sentiment and devotion, I'm ready to wager something that it was tenderness and devotion in the husband that first aroused like sentiments in the wife.

Mrs. Barrett was shrewd, far-seeing, business-like; a devoted and watchful mother; but her love for her husband had still the freshness, the delicate sentiment of young wifehood. When she thought proper, she bullied him shamefully; when she thought more proper, she "guyed" him unmercifully. Think of that!

It was very funny to see the great, solemn-eyed personification of dignity sitting meekly by while his food was snatched away from him, and some more wholesome, if less desirable, dish was offered in its stead. On such occasions, with unbroken gravity, he, in the interest of possible future sons-in-law, would suggest the withdrawal of the girls from the room while their mother indulged in such unseemly conduct.

But oh, to hear that wife tell of the sorrows and trials they had faced together, of their absurd makeshifts, of their small triumphs over poverty, of Lawrence's steady advance in his profession, of that beautiful day when they moved into a little house all by themselves—when he became, as he laughingly boasted, "a householder, not a forlorn, down-trodden boarder."

Their family, besides themselves, then consisted of one little girl and Lawrence's beloved old mother; and he had a room in which to study in peace; and the two women talked and planned endlessly about curtains and furniture and—oh, well, about some more very small garments that would, God willing, be needed before a very great while. And one day Lawrence looked about his little table, and said, "It's too good—it can't last—it can't!" and the women kissed him and laughed at him; yet all the time he was right; it did not last. An awful bolt seemed to fall from the blue sky. It was one of those pitiful disasters that sometimes come upon the very old, particularly upon those who have endured much, suffered much, as had old Mrs. Barrett in the past.

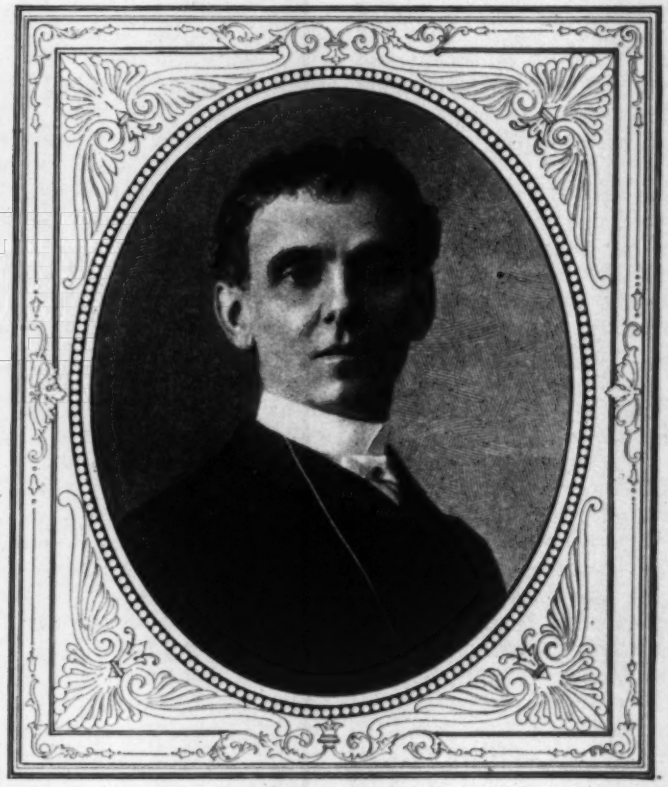
I wept as I heard the story of the devoted son's dry-eyed agony, of the awful fears his condition aroused in the minds of those close to him. Then suddenly she, the wife, had been stricken down, and her danger and that of the tiny babe had brought him to his old self again.

He worked on then for some months, grateful for the sparing of his dear ones, when quite suddenly and painlessly the stricken old mother passed from sleep to life everlasting. Then when Joseph was to be summoned—Joe, who worshiped the mother's footprint in the dust—he was not to be found. He had fallen again into disgrace, had been discharged, had disappeared, no one knew whither.

"Oh, dear Father!" cried Mrs. Barrett, "what did not Lawrence suffer for Joe, knowing what his agony would be when he knew all! The funeral took place. White as marble, Lawrence sent us all home, and waited himself till the last clod of earth was piled upon the grave, then waited till the men had gone—waited to kneel and pray a moment before leaving the old mother there alone. And as he knelt, he noted how dark it was growing, and thought he must not linger long or the gates would be locked against him. As he rose from his knees, he was startled to see through the dusk a tall form coming toward him. It would dodge behind a monument, and after a moment's pause would come a little nearer. Suddenly, the drooping, lurching figure became familiar to him. With a groan he hid himself behind a tombstone and waited—waited until suspicion became certainty, and he knew that the bent, weary, unkempt, unshorn funeral guest was his unfortunate brother Joe. He held his peace until the wanderer found his way along the darkening path to that pathetic stretch of freshly broken earth, where, with an exceeding bitter cry, he flung his arms above his head and fell all his length along the grave that held the sweetest and the holiest thing God had ever given him—an honest, loving mother—and clutched the damp clods in his burning hands, and gasped out, 'Oh, mother! I have hungered and I have tramped, with the curse upon me, too; I have hungered and tramped so far—so far—hoping just to be in time to see your dear face once more, and now they've shut you away from me—from the bad boy you never turned your patient

eyes away from! Oh, mother! whatever can I do without you—all alone! all alone!'

"At that child-like cry from the broken man prostrate on the grave, Lawrence's heart turned to water, and, kneeling down, he lifted to his breast the tear-stained, drink-blemished face of his brother, and kissed him as his mother might have done. Thus they prayed together for the repose of the soul of their beloved, and then, with his arms about the wanderer, to steady his failing steps, Lawrence led him to our little home, and as they entered, he turned and said, 'Joe, can't you take back those words, "all alone"—can't you?' and Joe nodded his head, and, throwing his arms about his brother's neck, answered, 'Never alone while my little brother Larry lives and forgives.'"



LAWRENCE BARRETT.

From the time when, as a ballet-girl, I was called forward and given the part of *Marie* in "The Marble Heart," a play Mr. Barrett was starring in, to the day of that really splendid combination with Mr. Edwin Booth, I never saw the former when he was not burning with excitement over some production he had in mind; if not yet in rehearsal. Even in his sleep he saw perfect pictures of scenery not yet painted, just as before "Ganalon" he used to dream of sharp lance and gay pennon moving in serried ranks, of long lines of nobles and gentlemen who wore the cross of the Crusader.

His friends were among the highest of God's aristocracy of brains. It was odd that sculptors, artists, poets, thinkers should shake hands with so "cold" a man, and call him friend.

I remember well the dismayed look that came upon his face when I was ordered from the ballet-ranks to take the place of the lady—a hard, high-voiced soubrette—who would have played *Marie* had not a sore throat mercifully prevented her. But at my first,

Thank you. I'd rather go—yonder—

pointing to the distant convent, his eyes widened; suddenly a sort of tremor came to his lips. He was at my side in an instant,

telling me to indicate my convent as on the opposite side, so that my own attitude would be more picturesque to the audience. Between the acts, he said to me, "Have you any opinion of *Marie*, Miss—er—er?"

"My name's just Clara," I timidly interjected.

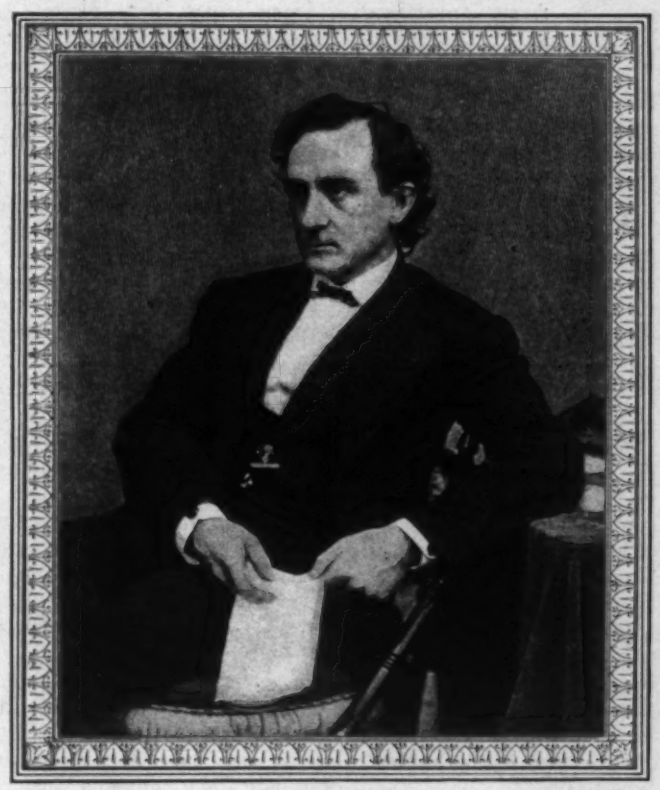
"Well," he smiled, "'just Clara,' have you formed any idea of this *Marie's* character?"

"Why," I answered, "to me she seems a perfect walking gratitude. In real life she would be rather dog-like, I'm afraid; but in the play, she is just beautiful."

He looked solemnly at me, and then he said, "And *you* are just beautiful, too; for you are a little, thinking actress. Now, if you have the power of expressing what you think, do you know, I am very honestly interested, 'just Clara,' in your share of tonight's work."

The play went well as a whole, and as *Marie* is one of the most tenderly pathetic creations conceivable, I sat and wept as I told her story; but imagine my amazement when, as Mr. Barrett bent over my hand, a great hot tear fell from his cheek upon it.

"Oh, my girl," he said when the play was over, "don't let anything on God's footstool dishearten you! Work! work! You have such power, such delicacy of expression with it—you *are Marie*, the little, stupidly religious, dog-like *Marie*—as you renamed her for me *Marie* the grateful."



EDWIN BOOTH.

When I was leading woman, he wished to do that play for a single night. Of course, *Marco* belonged to me, but the big, handsome, cold-voiced second woman could well talk through *Marco*, while she would (artistically speaking) damn *Marie*.

Mr. Barrett was very hungry-eyed—there was positive famine in his eyes—as he mournfully said, "I would give a great deal to hear you tell *Marie's* story again, to see you and your little bundle and bandaged foot. Such a clever touch that—the bandaged foot—no other *Marie* dares do that; but you have turned your back on the grateful one; you can't afford to do her again."

"Mr. Barrett," I asked, "do you wish me to play *Marie* now?"

"Do I wish it?" he echoed. "I wish it with all my heart; but I have no right to ask a sacrifice from you, even if it would benefit the whole performance, as well as give me a personal pleasure."

"If the manager does not object," I said, "I am quite willing to give up the leading part and play *Marie* again."

He held my hands—he fairly stammered for a moment—then he said, "You are an *artiste* and a brave and generous girl. I shall remember this action of yours, 'just Clara,' always."

The amazed manager, after some objection, having consented, I once more put on the rusty black gown, took my small bundle, and asked of the gay ladies from Paris my way to the convent yonder, finding in the tears of the audience and in the excellence of the general performance full reward for playing second fiddle that evening.

In my early married days, when the great coffee-urn was still a menace to my composure and dignity, at a little home dinner, when Mr. William Black, the British novelist, honored me with his presence on my right; Mr. Barrett, on my left, moved no one knows by what freak of memory, lifted his glass and, speaking low, said, "'Just Clara,' your health!"

I laughed a little and was nodding back, when Black, who saw everything through those glasses of his, cried out, "Favoritism—favoritism! Why, bless my heart, I drank your health ten minutes ago, and you never blushed a blush for me! And I am chief guest, and on the right hand of the hostess. Explanations are now in order."

And Mr. Barrett said that he would explain on the way to the club, whereupon Mr. Black wrinkled up his nose delightedly, and said he "scented a story." "And oh," he cried, "it's the sweetest scent in the world, the most fascinating trail to follow!"

But I was thankful that he did not hunt down his quarry then and there, for he could be as mischievous as a squirrel and as persistent as any *enfant terrible*, if he thought you were depriving him of a story.

Though tears creep into my eyes at the same moment, yet must I laugh whenever I think of Mr. Barrett's last "call" upon me. We were, without knowing it, stopping in the same hotel. On the way to the dining-room for a bit of lunch, my husband and Mr. Barrett met, exchanged greetings, and when the latter found I was not going to luncheon, and was, moreover, suffering from a most severe attack of neuralgia, he asked if he could not call upon me for a few moments.

Mr. Harriott looked doubtful, and while he hesitated, Mr. Barrett hastily added:

"Of course, I shall merely say how do you do, and express my sympathy, since I know something about neuralgia myself; that's all."

Upon which they turned back, and Mr. Harriott ushered the unexpected, the spick-and-span caller into my presence, with the reassuring words, "Mr. Barrett is sparing a moment or two of his time, Clara, to express his sympathy for you."

When a woman knows she is an "object," words of welcome for the unexpected visitor are apt to come haltingly from the tongue; and that I was an "object," no one can deny. A loose pink dressing-gown was bad; a knit white shawl, huddled about the shoulders, was worse; but, oh, worst of all, my hair was all scrambled up on the top of my head (hair was dressed low then), and a broad handkerchief bandage concealed from the eye, but not from the nose, the presence of a remedial poultice of flour and brandy.

I was aghast for a moment, but the warm pressure of Mr. Barrett's hand, his brightening eye, gave me such an impression of sincerity in his pleased greeting, that I forgot I was an "object," and asked him to sit down for a chat as eagerly as though I had had on all my war paint.

We were soon exchanging memories of the past, and Mr. Harriott, having a business engagement, excused himself and withdrew; Mr. Barrett calling after him, "I'll join you in a moment," resumed his conversation. There still stood on the table a pot of tea, and a plate holding two pieces of toast. They had been meant for my lunch; but neuralgia had the call, and lunch had been ignored. We talked on and on, and presently Mr. Barrett, seeing my bandage sliding down over my eyes, rose and, without pausing in his rapid description of a certain picture he had seen abroad in its creator's studio, passed behind me, tightened the knot of the handkerchief, put the sofa pillow behind my head, a stool under my feet, and resumed his seat.

Then I talked and talked, and grew excited, then thirsty. I drew the tray nearer and poured a cup of tea.

"Give me some," said Mr. Barrett, who was now telling me about a sitting of Parliament in London.

"Let me order some that's fresh," I replied.

"No, no!" he said impatiently, "that will be such an interruption—no, no!"

I gave him then a cup of cold tea. Presently I broke off a bit of the stiff, cold toast, with its chilled, pale gleam of butter, and nibbled it. His hand went forth and broke off a bit also. We were on a new poem then, and Mr. Barrett seemed thrilled to his finger tips with the delight of it. He repeated lines, I questioned his reading; we experimented, placing emphasis first on this word, then on that. We generally agreed, but we disagreed over Gladstone.

How fiercely we clashed over the "grand old man," those who knew Mr. Barrett will guess from the fact that during the fray he excitedly undid two buttons of his tight frock coat. The ends of his white silk muffler finally hung down his back, fluttering when he moved, like a small pair of white wings. I have a recollection, too, of his rising and lighting the gas, apparently unconscious of his act, while he passionately demanded of me the reason why Dickens could not create a real woman.

At last we came up hard and fast against "Hamlet." The air was thick with stories. Part of the time we talked together in our eagerness. Mr. Barrett's coat was quite unbuttoned; the curl on his wide brow had grown as frizzly as any common curl might grow. Two round, red spots spread over his high cheek-bones; his eyes were hungrily glowing; he had just taken a long breath and made a start on an audience with the Pope, when Mr. Harriott entered, and said, "I beg your pardon, Mr. Barrett, there's a man outside who is very anxiously inquiring for you."

"For me!" exclaimed Mr. Barrett, with astonishment; "that's rather impertinent, it seems to me."

Suddenly he noticed the gaslight. He started violently. He pulled out his watch, then sprang to his feet, crying, "Good God! Harriott, that's my dresser looking for me; I ought to be in my dressing-room. What will Mr. Booth think has become of me? And what, in heaven's name, do you two think of me?"

He hastily buttoned himself into rigidity, rescued the flying ends of his muffler, and holding my hands for a moment, he laughed, "You are not only 'just Clara,' but you are the only Clara that could make me so utterly forgetful of all rules of etiquette. Forgive and good-by!" and he made an astonishingly hasty exit.

The "call," that lasted from one till seven, with the accompanying picture of the stately Lawrence Barrett drinking cold tea and eating stiff, cold toast while he talked brilliantly of all things under heaven, is one of my quaintest memories.

One loves to think of those years of his close relations with Mr. Booth. Artistically, the combination was an ideal one; commercially, it was a most successful one; while it certainly brought out qualities of gentleness and devotion in Mr. Barrett that the public had not accredited him with.

The position of manager and co-star was a difficult one, and only Barrett's loving comprehension of Booth's peculiarities, as well as his greatness, made that position tenable. Mr. Booth loathed business details; he was sorrowful and weary; he had tasted all the sweets the world had to offer, but only their tang of bitterness was left upon his lips; and though he had grown coldly indifferent to the call of the public, Mr. Barrett believed that under this ash of lassitude there still glowed the clear fire of genius, and when they went forth to try their great experiment, Mr. Booth found himself respected, honored, guarded, as any woman might have been. He was asked no questions about scene or scenery, about play or percentage; his privacy and peace were ever of the first consideration. Mr. Barrett was his agent, manager, stage-manager, friend, co-worker, and dramatic guardian angel; all he asked of him in return was to act.

And how splendidly Mr. Booth responded the public can well remember. As he said laughingly to a friend, at the end of the first season: "Good work, eh? Well, why should I not do good work after all Barrett has done for me? Why, I never knew what c-o-m-f-o-r-t spelled before. I arrive; some one says, 'Here's your room, Mr. Booth;' I go in and smoke. At night, some one says, 'Here's your dressing-room, sir,' and I go in and dress—yes, and smoke, and then act. That's all, absolutely all that I have to do—except to put out my hand and take my surprisingly big share of the receipts now and then. Good work, eh? Well, I'll give him the best that's in me; he deserves it." And in the beautiful friendship that grew up between the melancholy, gentle Booth and the nervously energetic Barrett, I believe each gave to the other the best that was in him.

OF THE OLD GUARD.

DAVE HAWK, CONDUCTOR: LOOTER AND HERO.

By Frank H. Spearman,

Author of "The Run of the Yellow Mail," etc.

I NEVER found it very hard to get into trouble; as far back as I can remember that has come dead easy for me.

When this happened, I hadn't been railroading a month, and I was up with my conductor on the carpet, sweating from sheer grogginess and excitement. The job of front-end brakeman on a mountain division is no great stake for a man ordinarily, but it was one for me just then. We knew when we went into the superintendent's office that somebody was to get fired; the only question was who—the train crew or the operator? Our engine crew were out of it; it was up to the conductor and to me. Had the operator displayed red signals? The conductor said no; I said no: the operator said yes; but he lied. We couldn't prove it; we could only put our word against his; and, what made it the worse for me, my conductor was something of a liar himself.

I stood beading in a cold sweat, for I could see with half an eye it was going against us. The superintendent, an up-and-up railroad man every inch, and all business, but suspicious, was leaning the operator's way the strongest kind.

There wasn't another soul in the little room as the three of us stood before the superintendent's desk, except a passenger conductor, who sat behind me, with his feet on the window ledge, looking out into the yard.

"Morrison's record in this office is clean," the superintendent was saying of the operator, who was doing us smooth as smokeless powder; "he has never, to my knowledge, lied in an investigation. But, Allbers," continued the superintendent, speaking bluntly to my conductor, "you've never told a straight story about that Rat River switch matter yet. This man is a new man," he added, throwing a hard look at me. "Ordinarily I'd be inclined to take the word of two men against one, but I don't know one at all, and the other has done me once. I can't see anything for it but to take Morrison's word, and let you fellows both out. There wasn't any wreck, but that's not your fault, not for a minute."

"Mr. Rocksby," I protested, speaking up to the division boss in a clean funk—the prospect of losing my job that way, through a lying operator, took the heart clean out of me—"you don't know me, it is true, but I pledge you my word of honor——"

"What's your word of honor?" asked the superintendent, cutting into me like a hatchet. "I don't know any more about your word of honor than I do about you."

What could I say? There were men who did know me, but they were a far cry from the Rocky Mountains and the headquarters of the Mountain Division. I glanced about me from his face, gray as alkali, to Allbers, shuffling on the carpet, and to Morrison, as steady as a successful liar, taking my job and my reputation at one swallow, and to the passenger conductor with the glossy black whiskers, but he was looking out the window.

"What do I know about your word of honor?" repeated Rocksby sharply. "Allbers, take your man and get your time."

A wave of helpless rage swept over me. The only thing I could think of was to strangle the lying operator in the hall. Then somebody spoke.

"Show your papers, you fool!"

It came calm as sunshine and cold as a northwester from the passenger conductor behind me, from Dave Hawk, and it pulled me into line like a bugle call. I felt my English all back at once. Everybody heard him, and looked my way; again it was up to me. This time I was ready for the superintendent, or, for that matter, for the blooming Mountain Division. I had forgotten all about my papers till Dave Hawk spoke. I put my hand, shaking, into my inside vest pocket for a piece of oilskin—it was all I

had left; I was a good way from my base that year. I laid the oilskin on the superintendent's table, unfolded it jealously, and took out a medal and a letter that, in spite of the carefullest wrapping, was badly creased and sweated. But the letter was from my captain, and the bit of bronze was the Cross. Rocksby picked up the letter and read it.

"Where'd you get this?" he asked, indicating the Victoria.

"In the Soudan, sir."

Dave Hawk kept right on looking out the window. Neither my conductor nor the operator seemed to know just what the row was. Nobody spoke.

"What you doing here?" Rocksby went on.

"Have you been in the British army?" he asked curtly.

"Yes, sir."

He scowled a minute over Picton's scrawl, laid it down, and gratified his curiosity by picking up the medal. He studied the face of the token, looked curiously at the dingy red ribbon, twirled it and saw the words on the reverse, "For Honor," and looked again at me.

"I came out to learn the cattle business." His brows went up easy-like. "They cleaned me out." Brows dropped gentle-like. "Then I went bad with mountain fever." He looked decent at me.

"You say you had your head out the cupola and saw the white signal?" he asked, sort of puzzled.

"I saw the white signal." Rocksby looked at the operator Morrison.

"We'll adjourn this thing," said he at last, "till I look into it a little further. For the present go back to your runs."

We never heard any more of it. Allbers got out quick. I waited to pick up my stuff, and turned to thank Dave Hawk; he was gone.

It wasn't the first time Dave had pulled me out of the water. About two weeks before that I had crawled one night up on the front platform of the baggage at Peace River to steal a ride to Medicine Bend on Number One. It was Dave's train. I had been kicked out of the McCloud hospital two days before without a cent or a friend on earth, outside the old country, and I hadn't a mind to bother the folks at home any more, come Conan or the devil.

The night was bitter bad, black as a Fuzzy, and sleeting out of the foothills like manslaughter. When the train stopped at Rosebud for water, what with gripping at the icy handrail, and trying to keep my teeth steady on my knees, I must have been a hard sight. Just as the train was ready to pull out, Dave came by and poked his lantern full in my face.

He was an older man than I, a good bit older, for I was hardly more than a kid then, only spindling tall, and so thin I couldn't tell a stomachache from a backache. As I sat huddled down on the lee step, with my cap pulled over my head and ears, he poked his light full into my face, and snapped, "Get out!"

If it had been a headlight I couldn't have been worse scared, and I found afterward he carried the brightest lamp on the division. I looked up into his face, and he looked into mine. I wonder if in this life it isn't mostly all in the face, after all? I couldn't say anything; I was shaking in a chill as I pulled myself together and climbed down into the storm.

Yet I never saw a harder face in some ways than Dave Hawk's. His visor hid his forehead, and a black beard covered his face till it left only his straight, cold nose and a dash of olive-white under the eyes. His whiskers loomed high as a Cossack's, and his eyes were onyx black with just such a glitter. He knew it was no better than murder to put me off in that storm at a mountain siding; I knew it; but I didn't care much, for I knew before long I should fall off, anyway. After I crawled down he stood looking at me, and with nothing better on, I stood looking at him.

"If you get up there again I'll break your neck," he promised, holding up his lantern. I was quiet; the nerve was out of me.

"Where you going?" he asked shortly.

"Medicine Ben——"

"Get into the smoker."

It was breaking day when he bent over me.

"We're getting into the Bend," he said gruffly. "Got any money for breakfast?"

"I haven't a cent on God's earth." He put his hand in his pocket, and pulling out a handful of loose bills shoved one into my fingers.

"I'll take it from you and gladly," I said, sitting up. "But I'm not a beggar nor a tramp."

"Off track?"

"Yes. I'm going to enlist——"

His teeth flashed. "That's worse than railroading, ain't it?"

Something came into my head like a rocket.

"If I could get started railroading."

"Get started easy enough."

That's how I happened to show him my Victoria. He gave me a card to the trainmaster, and next day I went to braking for Allbers, who, by the way, was the biggest liar I ever knew.

But the morning I got into Medicine Bend that first time on Number One I had another scare. I went into the lunch room for coffee and sandwiches, and threw my bill at the boy. He opened it up, looked at it, and looked at me.

"Well," I growled, for I was impudent with luck and a hot stomach; "good, ain't it?"

"Smallest you got?"

I nodded as if I had a pocketful. He hustled around and came back with a handful of money. I said nothing, but when he spread it out before me I sat paralyzed. I had just assumed that Dave had given me a dollar. Sinkers, deducting the price of two coffees and six sandwiches from the bill, counted out nineteen dollars and thirty cents for me.

That change kept me running for a month, and after my first pay day I hunted up Dave, to pay him back. I found him in the evening. He was sitting alone on the eating-house porch, his feet up against the rail, looking at the mountains in the sunset.

"Never mind," he said indifferently, as I held out a twenty-dollar bill and tried to speak my little piece. He never moved except to wave back my hand.

"Oh, but I can't let you do that," I protested.

"Put up your money, Tommie." He called me Tommie. "No," he repeated, pushing away my hand, his face set hard; and when Dave's face did set, it set stony. "Put up your money; you don't owe me anything. I stole it."

It was a queer deal out on the West End in those days. It was a case of wide open from the river to the Rockies. Everybody on the line from the directors to the cartinks was giving the company the worst of it. The section hands hooked the ties for the maintenance, the painters drank the alcohol for the shellac, the purchasing agent had more fast horses than we had locomotives, and what made it discouraging for the conductors, the auditors stole what little money the boys did turn in.

A hard place to begin railroading the old line was then; but that's where I had to tackle the game, and in all the hard crowd I mixed with, Dave Hawk was the only big man on the division. There were others there who fixed the thing up by comparing notes on their collections, and turning in percentages to make their reports look right. But Dave was not a conspirator; never made a confidant of any man in his stealing or his spending, and despised their figuring. He did as he pleased, and cared for no one; no superior had any terror for Dave. He had a wife somewhere back east of the river, they said, who had sold him out—that's why he was in the mountains—and he lived among free and easy men a lonely life. If anybody ever got close to him, I think maybe I did, though I was still only a freight conductor when the lightning struck the division.

It came with a clean sweep through the general offices at the River—everybody in the auditing department, the executive heads down to general manager, and a whole raft of West End conductors. It was a shake-out from top to bottom, and the blood on our division went white and sickly very fast.

Of course it was somebody's gain. When the heads of our passenger conductors began to drop, they began setting up freight men. Rocksby had resigned a year before, and Haverly, his successor, an ex-dispatcher, and as big a knave as there was on the pay-roll, let the men out right and left, with the sole idea of saving his own scalp. By the time I was put up to a passenger train the old force was pretty much cleared out except Dave.

Every day almost we looked to see him go. Everybody loved him because he was a master railroad man, and everybody except Dave himself was apprehensive about his future. He moved on just the same, calm and cold as ice-water, taking the same old chances, reckless of everything and everybody. I never knew till afterward, but the truth was Haverly, with all his bluff talk, was just enough afraid of Dave Hawk to want to let him alone. The matter, though, focused one day up in the old office in an unexpected way.

Haverly's own seat got so hot that, bedeviled by his fears of losing it, and afraid to discharge Dave, who now sailed up and down the line, reckless as any pirate of the Spanish Main, he cowered, called Dave into the little room at the wickiup, and asked him to resign. In all the storm that had raged on the division, the old conductor alone had remained calm. Every day it was somebody's head off; every night a new alarm: Dave alone ignored it all. He was through it all the shining mark, the dare-devil target, yet he bore a charmed life and survived every last associate. Then Haverly asked him to resign. Dave, bitter angry, faced him with black words in his throat.

"It's come to a showdown," muttered the superintendent uneasily, after a minute's talking. "Do you want to resign?"

Dave eyed the mountains coldly. "No."

"You'll have to."

"Have to?" Hawk whirled dark as a storm. "Have to? Who says so?"

The superintendent shifted the paper-weight on the desk uncomfortably.

"Why should I resign?" demanded the old conductor angrily. "Resign?" He rose from his chair. "You know I'm a thief. You're a thief yourself. You helped make me one. I've carried more men for you than for anybody else on the whole division. I don't resign for anybody. Discharge me; I don't ask any odds of you."

Haverly met it sullenly, yet he didn't dare do anything. He knew Dave could ruin him any day he chose to open his mouth. What he did not know was that Dave Hawk was molded in a class of men different from his own. Even dishonor was safe in the hands of Dave Hawk.

There was no change after, except that darker, moodier, lonelier than ever, Dave moved along on his runs, almost the last of the Old Guard. Better railroad man than he never took a train out of division. Stress of wind or stress of weather, storm, flood, or

blockade, Dave Hawk's trains came and went on time or very close. So he rode, grim old privateer, with his letters of marque on the company's strongbox, and Haverly trembled night and day till that day came that fear had foretold to him. A clap of thunder struck the wickiup, and Haverly's head fell low. Dave Hawk sailed boldly on.

I was extra passenger man when John Stanley Bucks took the West End. He came from south of our country, and we heard great things about the new superintendent, and about what would happen as soon as he got into the saddle. What few of the old men in the wickiup were left looked at Bucks just once and began to arrange their temporal affairs. His appearance bore out his reputation. Only everybody, while pretty clear in his own mind as to what *he* would do —that is, as to what he would have to do— wondered what Dave would do.

He and Bucks met. I couldn't for the life of me help thinking when they struck hands, this grizzled mountaineer and this contained, strong, soldierly executive who had come to command us, of another meeting I once saw when I carried Crook out on a special, and watched him at Bear Dance strike hands with the last of the big fighting chiefs of the mountain Sioux.

For three months Bucks sat his new saddle without a word or an act to show what he was thinking; then there came from the little room a general order that swept right and left, from trainmaster to wrecking boss. The last one of the old timers in the operating department went except Dave Hawk.

The day the order was bulletined, Bucks sent for Dave; sent word by me he wanted to see him.

"Come on," said Dave to me when I gave him the message.

"What do you want me for?"

"Come on," he repeated; and greatly against my inclination I went up with him. I looked for a scene.

"Hawk, you've been running here a good while, haven't you?" Bucks began.

"Long as anybody, I guess," said Dave curtly.

"How many years?"

"Nineteen."

"There's been some pretty lively shakeouts on the system lately," continued Bucks. The veteran conductor looked at him coldly. "I am trying to shape things here for an entire new deal."

"Don't let me stand in your way," returned Dave grimly.

"That's what I want to see you about."

"It needn't take long," blurted Dave.

"Then I'll tell you what I want."

"I don't resign," interposed Dave. "You can discharge me any minute."

"I wouldn't ask any man to resign, Hawk, if I wanted to discharge him. Don't make a mistake like that. I suppose you will admit there's room for improvement in the running of this division?"

Dave never twitched. "A whole lot of improvement," Bucks added, with perceptible emphasis. It came from the new superintendent as a sort of gauntlet, and Dave picked it up.

"I guess that's right enough," he replied candidly; "there *is* room for a whole lot of improvement. If I sat where you do I'd fire every man that stood in the way of it, too."

"That's why I've sent for you," Bucks resumed.

"Then drop the chinook talk and give me my time."

"You don't understand me yet, Hawk. I want you to give up your run. I want your friend Burnes here to take your run."

A queer shadow went over Dave's face. When Bucks began, he was getting a thunderstorm on. Somehow the way it ended, the way it was coming about—putting me into his place—I, the only boy on the division he cared a whoop about—it struck him, as it struck me, all in a heap. He couldn't say a word; his eyes went out the window on to the mountains; something in it looked like fate. For my part I felt murder guilty.

"What I want you to do, Hawk," added Bucks evenly, "is to come into the office here with me and look after the train crews. Just at present I've got to lean considerably on a trainmaster. Do you want the job?"

The silent conductor turned to stone.

"The men who own the road are new men, Hawk; they didn't steal it. They bought it and paid for it. They want a new deal, and they propose to give a new deal to the men. They will pay salaries a man can live on honestly; they will give no excuse for knocking down; they want what's coming to them, and they propose the men shall have their right share of that in the pay checks.

"But there's more than this in it. They want to build up the operating force, as fast as it can be built, from the men in the ranks. I aim to make a start now on this division. If you're with me, hang up your coat here the first of the month and take the train crews."

Dave left the office groggy. The best Bucks could do he couldn't get a positive answer out of him. Dave was overcome, and couldn't focus on the proposition. Bucks saw how he had gone to pieces, and managed diplomatically to leave the matter open; Callaghan, whom Bucks had brought with him as assistant, filling in meanwhile as trainmaster.

The matter was noised. It was known that Dave, admittedly the brainiest and most capable of the Old Guard, had been singled out, regardless of his past record, for promotion. "I'm not here sitting in judgment on what was done last year," Bucks had said plainly. "It's what is done this year and next that will count in this office."

And the conductors, thinking there was a chance, believing that at last if they did their work right they would get their share of the promotions, began to carry their lanterns as if they had more important business than holding up stray fares.

Meantime Dave hung to his run. Somehow the old run had grown a part of him, and he couldn't give it up. When he told Bucks at the end of the week that he would like another week to make his decision, the superintendent waived it to him. Everybody began to make great things of Dave. Some of the boys called him trainmaster, and told him to drop his punch and give Tommie a show.

He didn't take the humor the way one would expect. Always silent, he grew more than that—somber and dejected. We never saw a smile on his face. "Dave is off," muttered Henry Cavanaugh, his old baggageman. "I don't understand it. He's off. You'd ought to talk to him, Tommie. You're the only man on the division that can do it."

I was ordered west that night to bring a military special from Washakie. I rode up on Dave's train. The hind Los Angeles sleeper was loaded light, and when Dave had worked the coaches and walked into the stateroom to sort his collections, I followed him. We sat half an hour alone and undisturbed, but he wouldn't talk. It was a heavy train and the wind was high. We made Rat River after midnight, and I was still sitting alone in the open stateroom when I saw Dave's green light coming down the darkened aisle. He walked in, put his lamp on the floor, sat down, and threw his feet on the cushions.

"How's Tommie to-night?" he asked, leaning back, in his old teasing way, as if he hadn't seen me before. He played light heart sometimes, but it was no more than played—that was easy seeing.

"How's Dave?" He turned, pulled the window shade and looked out. There was a moon, and the night was bright, only windy.

"What are you going to do with Bucks, Dave?"

"Do you want my punch, Tommie?"

"You know better than that, don't you?"

"I guess so."

"You're blue to-night. What's the matter?" He shifted, and it wasn't like him to shift.

"I'm going to quit the West End."

"Quit? What do you mean? You're not going to throw over this trainmaster offer?"

"I'm going to quit. What's the use?" he went on slowly. "How can I take charge of conductors, talk to conductors? How can I discharge a conductor for stealing when he knows I'm a thief myself? They know it; Bucks knows it. There's no place among men for a thief."

"Dave, you take it too hard; everything ran wide open here. You're the best railroad man on this division; everybody, old and new, admits that."

"I ought to be a railroad man. I held down a division on the Pan Handle when I was thirty years old."

"Were you a railroad superintendent at thirty?"

"I was a trainmaster at twenty-seven. I'm forty-nine now, and a thief. The woman that ditched me is dead; the man she ran away with is dead. My baby is dead, long ago." He was looking out, as he spoke, on the flying desert, ashen in the moonlight. In the car the passengers were hard asleep, and we heard only the slue of the straining flanges and the muffled beat of the heavy truck under us.

"There's no law on earth that will keep a man from leaving the track once in a while," I argued; "there's none to keep him from righting his trucks when the chance is offered. I say, a man's bound to do it. If you won't do it here, choose your place and I'll go with you. This is a big country, Dave. Hang it, I'll go anywhere. You are my partner, aren't you?"

He bent to pick up his lantern. "Tommie, you're a great boy."

"Well, I mean it." He looked at his watch, I pulled mine; it was one o'clock.

"Better go to sleep, Tommie." I looked up into his face as he rose. He looked for an instant steadily into mine. "Go to bed,

Tommie." He smiled, pulling down his visor, and turning, walked slowly forward. I threw myself on the couch and drew my cap over my eyes. The first thing I felt was a hand on my shoulder. Then I realized I had been asleep, and that the train was standing still. A man was bending over me, lantern in hand. It was the porter.

"What's wrong?" I exclaimed.

"There's trouble up ahead, Mr. Burnes," he exclaimed huskily. I sprang to my feet. "Have you got your pistol?" he stuttered.

Somebody came running down the aisle, and the porter dodged like a hare behind me. It was the hind-end brakeman, but he was so scared he could not speak. I hurried forward.

Through the head Los Angeles sleeper, the San Francisco cars, and the Portland, I ran without meeting a living soul; but the silence was ominous. When I caught a glimpse of the inside of the chair car, I saw the ferment. Women were screaming and praying, and men were burrowing under the foot-rests. "They've killed everybody in the smoker!" shouted a traveling man, grabbing me.

"Make way, won't you!" I exclaimed, pushing away from him through the mob. At the forward door there was another panic, as I was taken for one of the train robbers. Passengers from the smoker were jammed together there like sardines. I had to pile them bodily across the seats to get through and into the forward car.

It was over. The front lamps were out and the car smoking bluish. A cowboy hung pitched head and arms down over the heater seat. In the middle of the car Henry Cavanaugh, crouching in the aisle, held in his arms Dave Hawk. At the dark front end of the coach I saw the outline of a man sprawled on his face in the aisle. The news agent crawled out from under a seat. It must have been short and horribly sharp.

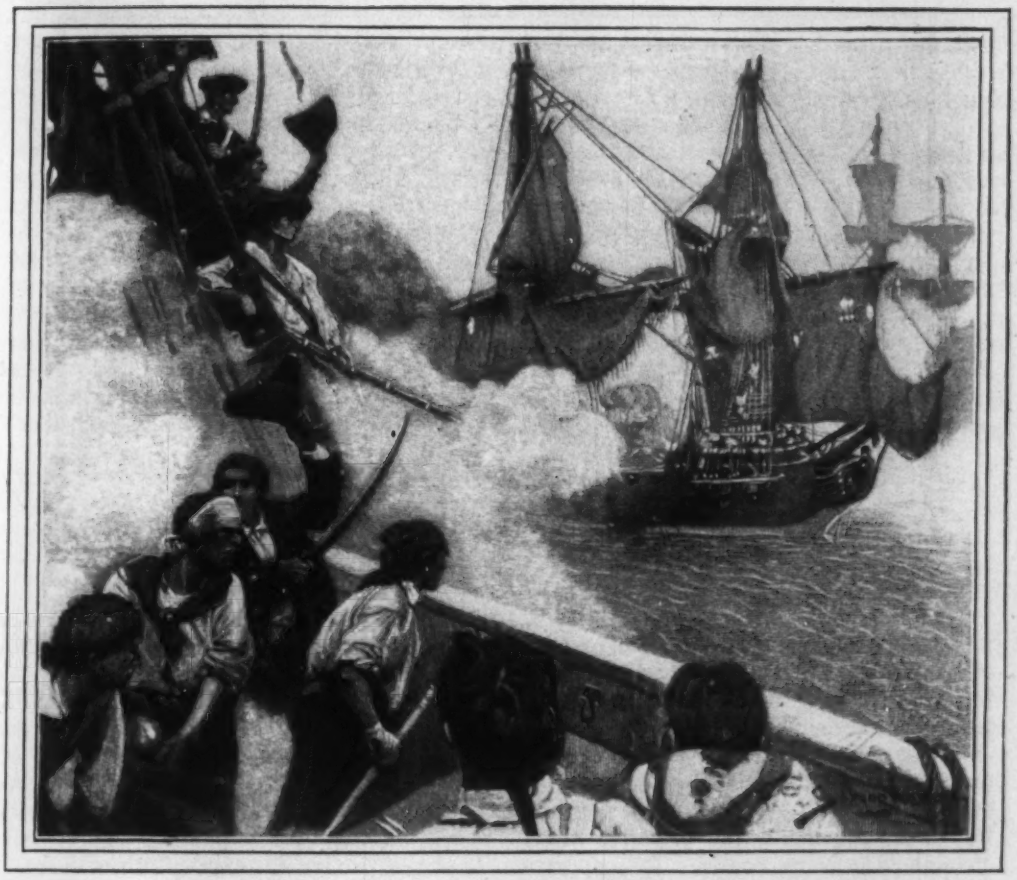
They had flagged the train east of Bear Dance. Two men boarded the front platform of the smoker and one the rear. But the two in front opened the smoker door just as Dave was hurrying forward to investigate the stop. He was no man to ask questions. He saw the masks and covered them instantly. Dave Hawk any time and anywhere was a deadly shot. Without a word he opened on the forward robbers. A game cowboy back of him pulled a gun and cut into it. He was the first to go down, wounded. But the train boy said Hawk himself had dropped the two head men almost immediately after the firing began, and stood free-handed, when the man from the rear platform put a Winchester almost against his back. Even then, with a hole blown clean through him, he had whirled and fired again. We found the man's blood on the platform in the morning, but whoever he was, he got to the horses and got away.

When I reached Dave, he lay in his baggageman's arms. We threw the carrion into the baggage car, and carried the cowboy and the conductor back into the forward sleeper. I gave the go-ahead orders, and hurried again to the side of the last of the Old Guard. Once his eyes opened, wandering stonily; but he never heard me, never knew me, never spoke. As his train went that morning into division he went with it. When we stopped, his face was cold. It was up to the Grand Master.

A game man always, he was never a cruel one. He called himself a thief. He never hesitated with the other men, high and low, to loot the company. The big looters were financiers. Dave was only a thief, yet gave his life for the very law he trampled under foot.

Thief, if you please; I don't know. We needn't quarrel over the word he branded himself with. Yet a trust of money, of friendship, of duty were safer far in Dave's hands than in the hands of abler financiers.

I hold him not up for a model, neither glory in his wickedness. When I was friendless, he was my friend. His story is told.



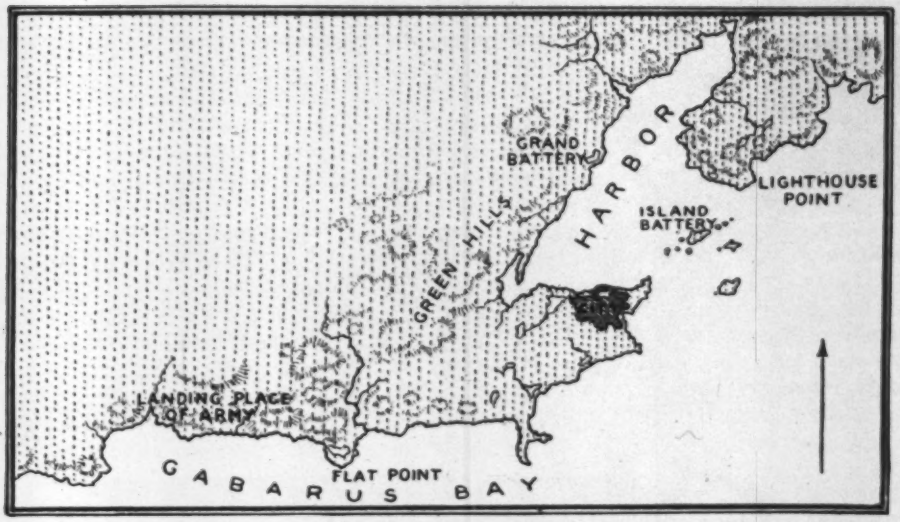
COLONIAL FIGHTERS AT LOUISBOURG.

By Cyrus Townsend Brady,

Author of "For Love of Country," "American Fights and Fighters," etc.

IN the year 1744, Louisbourg, on Cape Breton Island, was the only naval depot held by the French on the continent of North America. It commanded the St. Lawrence River, afforded a safe harbor of refuge for fleets, an excellent base for future naval operations against the English colonies, and was an advantageous point of departure for possible privateers. The French had fortified Louisbourg with massive ramparts, built upon scientific principles, and costing twenty-five years of labor, and over 20,000,000 livres (between four and five million dollars). The French believed the town absolutely impregnable, though the garrison, through long ill-treatment, was almost at the point of mutiny. The spirit of the peasants, traders, and other inhabitants was not much better. The folly of France in allowing such conditions to obtain in the place upon which so much money had been lavished, and which was deemed of such importance, is apparent. Aside from the fortifications and harbor, the place had little value; the inhabitants were poor and their dwellings mean.

The long peace between England and France was broken in 1744, and though the ensuing period of war was marked by intervals of feverish peace, the conflict did not end until France, ruined at sea at Trafalgar, was finally crushed on land at Waterloo. The two greatest results of these wars, from our point of view, were first, the loss to France of all of her American possessions, and second, the independence of the United States.



Map of Louisbourg, 1745.

When the news of the declaration of war was received by du Quesnel, the Governor of Louisbourg, he immediately despatched a force to capture the fisheries at Canso, in Nova Scotia, and, having succeeded in the enterprise, he sent forth a larger expedition under du Vivier, his best subordinate (his only good one, by the way), to take Port Royal, or Annapolis, the principal English stronghold in Nova Scotia. The expedition failed in the end. The news of these attacks was at once carried down the coast until it reached the ears of the versatile William Shirley, the Governor of Massachusetts. Shirley, a capable English barrister, was an able and ambitious lawyer and administrator, an author of tragedies in a small way, who believed himself to be a born soldier of a high order. He immediately projected—it is said at the instance of William Vaughan, of Damariscotta, Maine—a return stroke in the capture of the redoubtable fortress of Louisbourg. Vaughan was a bold, impetuous man of wealth and prominence, a member of the Massachusetts General Court and interested in the fishing industry, and therefore doubly inimical to Louisbourg as a standing menace to the profitable fishing of the Grand Banks. Having with difficulty won over the Massachusetts General Assembly to acquiesce in his scheme—by a majority of one, only obtained, it is said, by the opportune breaking of a leg of one of the opposition, which kept him at home when the final vote was taken—Shirley, with characteristic courage and zeal, prepared to carry out the expedition.

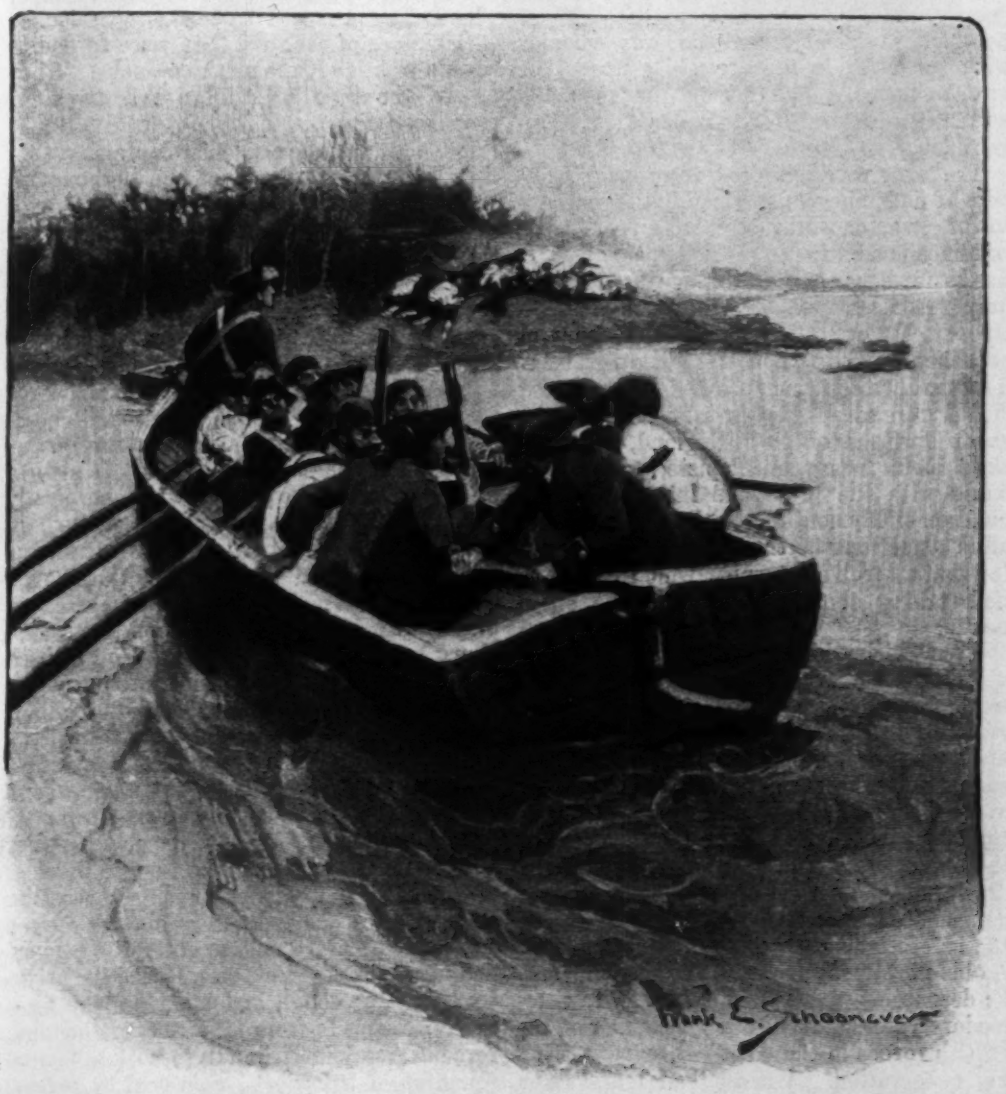
The grotesque audacity of the enterprise is apparent when we reflect that, save for a few old Indian fighters and some inconsequent remnants of the disastrous Cartagena expedition, there was not a single professional soldier in the colonies at the time; that there were no regular troops, no trained officers, no experienced veterans, no naval force, and that Massachusetts was entirely bankrupt, its paper practically worthless.

The prime movers of the expedition had so little idea of the magnitude of their undertaking that it was gravely proposed to advance upon Louisbourg in the midst of winter, when the depth of the snow which would probably be piled up around the ramparts would enable them to attack at once and, by swarming over the walls, capture the city! When they finally set forth, Shirley's detailed plan for surprising the town when the garrison was asleep was scarcely less absurd than this winter proposition. However, just because nobody realized the nature of the attempt, everybody entered upon the affair with light-hearted zeal. It is a maxim in war that green troops will attempt that impossibility from which the experienced veteran recoils, and this enterprise evidenced the soundness of the maxim.

Massachusetts sent about thirty-three hundred men, Connecticut five hundred, and New Hampshire the same number, a part of whom were paid by the bankrupt but enthusiastic colony of Massachusetts. New York lent to the expedition some eighteen cannon of assorted sizes and qualities. The other colonies gave their good will and their prayers,

and nothing else. Cautious Rhode Island did enlist a number of men for the purpose, but waiting too long to see which way the "cat would jump" the contingent did not arrive until after the siege was over. Including the guns from New York, the artillery train of the army comprised thirty-four cannon and mortars, the largest being a twenty-two pounder. With ignorant audacity, they counted upon making up a proper train of siege guns by taking them from the French, and by Shirley's orders they carried with them a large quantity of ammunition and balls for the forty-two pounders. About ninety transports were easily assembled, consisting of fishing and coastwise trading vessels, the war having broken up the fisheries and destroyed trade. These were convoyed by a dozen armed vessels belonging to the navies of the separate colonies, assembled for the purpose.

Shirley placed the naval force under the command of Captain Edward Tyng, of Massachusetts, who had displayed his courage and capacity by recently capturing a French privateer which greatly outclassed his own ship. His flagship was the frigate "Massachusetts," of twenty-four guns. Captain John Rous, another hardy New England sailor, commanded the "Shirley Galley," a ship of twenty guns; and the other war vessels, except the "Cæsar," of twenty guns, were of less force.



LANDING IN GABARUS BAY.

The army was commanded by one William Pepperell, a prosperous and enterprising merchant of Kittery, Maine, one of the richest and most influential men in the colonies. The son of a Welsh imigrant who had made a fortune by trade, shipbuilding, and fishing, he was a man of great native shrewdness and capacity, who had been reasonably well educated, having gone so far as to study surveying and navigation, though, like many other men of his time, he seems to have prosecuted these studies to the neglect of the gentle art of spelling. Although a colonel of militia when appointed lieutenant-general of this expedition, he had enjoyed no military experience whatever. Nobody in the army had, for that matter. Courage, energy, tact, good nature, and good sense he had in plenty, and he was popular with the army, a first requisite under the circumstances. The second in command was Major-General Roger Wolcott, of Connecticut.

The army was recruited from large numbers of unemployed fishermen in the seacoast towns—who carefully took with them their cod lines in addition to their fire-locks—from hardy farmers, substantial mechanics, and daring frontiersmen. The most singular contingent, however, was a goodly company of preachers. The famous Whitfield furnished a motto for the flag in the following words: *Nil desperandum Christo duce*, and to the stern Puritans of New England, the fact that their foes were Papists, whom they hated with the proverbial intensity of the children of Plymouth Rock, lent to the whole affair something of the nature of a crusade. It was that religious spirit which lifted the undertaking above the level of the opera bouffe.

Even Shirley himself was sensible that as a military performance the enterprise was more or less of a farce. He proposed, however, to avert all disaster by giving from his house in Boston, before the depature, such minute directions as would provide for every emergency and suffice for every contingency, in order to insure the success of the enterprise. These orders were actually drawn up, and constitute an unique military document, a monument to the industry of the indefatigable governor, if nothing else. As his naval contingent was so insignificant, he despatched a swift-sailing vessel to Commodore Peter Warren, the commander of the British forces in the West Indies, requesting his coöperation. Warren had married an American woman, owned large tracts of land in the colonies, and was much interested in promoting their welfare.

On the 24th of March, 1745, the fleet set sail from Nantasket Roads, and after a very hazardous and stormy passage arrived early in April at the harbor of Canso, which they promptly took possession of. There are numerous interesting contemporary accounts of the expedition in the shape of diaries, letters, and sermons, which show that Pepperell was not alone in the army in his contempt of orthography. One of them refers to the passage in the following terms: "But not haveing a good Pilate suffered verry much att sea." Shade of the Procurator!

Arrived at Canso they found that the harbor of Louisbourg and the adjacent shores, where they proposed to land, were blocked with masses of ice, and they were forced to remain inactive for some three weeks. They passed the time in drilling and drinking, preaching and playing. Meanwhile, Tyng, Rous, and the other colonial captains established a strict blockade of the harbor with the privateers. It required no mean skill and seamanship on the part of these New England privateersmen to maintain an efficient blockade on such a coast and keep off the dangerous lee shore.

On the 18th of the same month the colonists, encamped at Canso, were surprised by the sound of heavy cannonading to seaward. It seems that the French frigate "Renommée," 32, then commanded by the distinguished Comte de Kersaint, who lost his life and his ship subsequently while heroically fighting against the great Lord Hawke in the famous night battle in the storm at Quiberon Bay, had been sent by the French Government, which had heard of the expedition, with despatches and supplies to Louisbourg. The "Renommée" first fell in with the "Shirley Galley," which promptly engaged her. Captain Rous made so gallant a fight with his little ship that he held the heavy frigate off until the "Massachusetts" and some of the other privateers came within range. The "Renommée" was brilliantly fought and manœuvered by her able captain, but the delay caused by the superb fighting of the "Shirley Galley" enabled the other ships to close, and de Kersaint was forced to abandon his attempt to enter the harbor, and turned back to France. He led the privateers a long chase, and by a gallant fight finally escaped from their overwhelming force. A day later he fell in with a belated squadron of transports, convoyed by several small privateers, and with them he sustained

another severe engagement, in which, however, he effected nothing, as the convoy all got in safely.

On the 22d of April a heavy frigate flying the English flag came into the harbor. It was the "Elthan," 40, the first ship of Commodore Warren's squadron. In the absence of orders the Commodore had at first refused to leave his station, but having received word from England, after his refusal, that he should coöperate with the colonists, he had gathered such ships as he could and set sail for Boston. Having learned from a Massachusetts schooner he overhauled that the expedition had sailed, he changed his course and came direct to Louisbourg. On the 23d of April the rest of the squadron, comprising the "Superbe," 60, "Launceston," 40, and "Mermaid," 40, arrived at Canso. After consulting with Pepperell the Commodore immediately sailed to assume charge of the blockade, the colonial ships, by Pepperell's orders, being put under his command.

Toward the last of April the ice having broken, and the harbors being open, the weather mild and pleasant, the army embarked on the shipping and beat up toward Louisbourg. On the morning of Saturday, the 30th, a landing was effected in Gabarus Bay, which Pepperell managed with great skill. The privateers ranged along the shore poured a furious fire upon the exposed places to the west of the town.

THE RECONNAISSANCE OF THE GRAND, OR ROYAL, BATTERY.

"The Indian . . . with his courage stimulated by Vaughan's whisky . . . crawled into the battery, and found . . . it . . . deserted."

The regiments embarked in the boats of the fleet, which were directed toward Flat Rock Point. Du Chambon, who had succeeded to the command of the place on the death of du Quesnel a short time before, sent Captain Morepain, a French privateersman, with eighty men to oppose the landing. The boats pulled vigorously toward the shore, but when almost within musket range suddenly turned to the left, and dashed toward a little sand-beached bay formed by the mouth of a river, which offered easy access to the shore. Wolfe landed there years after. Morepain and his men made for the same spot, but as they had to traverse the large arc of a circle, while the boats had a much shorter distance to go in a straight line, the advance guard was able to make a landing before the French party appeared. When they did come in touch, however, they attacked with great spirit, but were beaten off with severe loss by the constantly increasing number of the Americans. They thereupon retired to the town. Advance parties were immediately sent out by Pepperell to cover the landing of the rest of the army, which occu-

pied several days, the troops lying at night upon the ground, very much exposed and without cover. Fortunately the weather then and during the whole of the siege continued unusually mild and agreeable.

On the second day after the landing Pepperell detached the irrepressible Vaughan with some 400 men to advance through the woods, pass around the town, and destroy the valuable storehouses in the rear of the Grand Battery. The expedition met with no opposition, and Pepperell was apprised of its success by vast columns of smoke which rose from the burning buildings.

The next morning, May 3d, with but thirteen men, Vaughan made a reconnaissance of the Grand, or Royal, Battery. As the little party approached they discovered no signs of life, and it appeared to the Americans that the battery had been abandoned. Unable to credit the testimony of their eyes, they hesitated on the outskirts of the battery for some time, and Vaughan finally bribed an Indian, by the proffer of a whisky flask which he had in his pocket—possibly for just such emergencies, for he is careful to tell us that he did not drink himself—to enter the fort. The Indian was drunk enough to be reckless, and with his courage further stimulated by Vaughan's whisky he crawled into the battery, and found that it was indeed deserted. The French, in cowardly panic at the sight of the burning buildings, had first hauled down their flag, and hastily spiking their guns, fled to the city. When the rest of the party entered the fort, William Tufts, an eighteen-year-old Massachusetts boy, climbed up the flagstaff and fastened his red coat to the top in lieu of a British ensign. The French greeted him with a general discharge of artillery, which did no damage. Vaughan immediately despatched a messenger to Pepperell informing him of the capture in the following telling words:

> May it please your Honour to be informed that by the grace of God and the courage of 13 men, I entered the Royal battery about 9 o'clock, and am waiting for a reinforcement and a flag.

THE SEIZURE OF THE BATTERY.

"William Tufts, an eighteen-year-old Massachusetts boy, climbed up the flagstaff and fastened his red coat to the top in lieu of a British ensign."

Meanwhile the French, in four boats, repenting of their panic, returned to reoccupy the fort. The dauntless Vaughan with his thirteen devoted men stood on the open beach in plain view (why they did not occupy the fort is hard to understand) and, under the fire of the French guns from the town and Island batteries, beat back by the accuracy of their fire the boats filled with Frenchmen. They succeeded in maintaining their ground until reënforcements arrived, making the capture secure.

This may be considered as the determining event of the siege, and it was the one detail of Shirley's astonishing plan which was successfully carried out. The besiegers found themselves in possession of a number of heavy guns of the latest and most improved pattern. The spiking had been done so carelessly that Major Seth Pomeroy, who was a gunsmith by trade, was able to extricate the

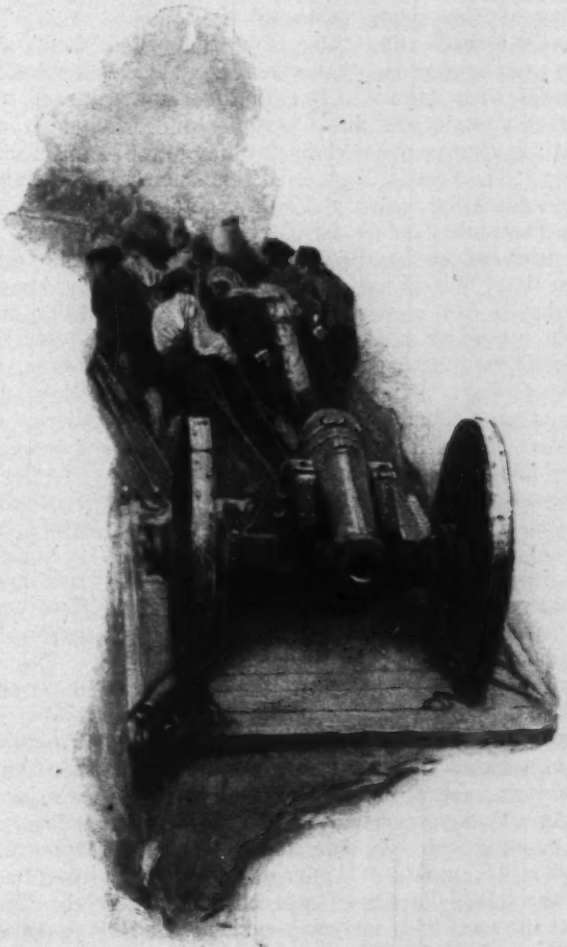
files from the "Tutch holes" without difficulty. A notable man this Pomeroy. Says Parkman:

> On board one of the transports was Seth Pomeroy, gunsmith at Northampton, and now major of Willard's Massachusetts regiment. He had a turn for soldiering, and fought, ten years later, in the battle of Lake George. Again, twenty years later still, when Northampton was astir with rumors of war from Boston, he borrowed a neighbor's horse, rode a hundred miles, reached Cambridge on the morning of the battle of Bunker Hill, left his borrowed horse out of the way of harm, and walked over Charlestown Neck, the scene of action, as the British were forming for the attack. When Israel Putnam, his comrade in the last war, saw from the rebel breastwork the old man striding, gun in hand, he shouted, "By God, Pomeroy, you here! A cannon-shot would waken you out of your grave!"

In their hasty evacuation the French had failed to destroy the munitions of war in the battery, and the New Englanders found themselves in possession of what they quaintly describe as "sume bums," which the "bumaneers" of the army put to good use in bombarding the town.

The English forty-two-pound balls just fitted the captured guns, and they immediately began to play upon the town with great effect. The morass which extended from the landing-place to the wall of the fort rendered it impossible to draw the guns which the army had brought with them and landed from the transports over the ground in the usual way. Lieutenant-Colonel Meserve, who happened to be a carpenter, improvised great flat sledges upon which the cannon were placed. Some 200 men were attached to each sledge by breast straps and ropes, and the guns were dragged over the marshes until they could be mounted in the five batteries which were opened near the town. The guns from the Grand Battery, which had been captured so easily, were distributed among these several batteries, and a furious fire was poured upon and returned from the French works. The diaries are full of the roaring of cannon, the exploding of the "bums" or "bumbs," as the word is indifferently spelled!

There was a woeful lack of competent artillerists in the besieging force, and Commodore Warren, at the request of Pepperell, sent several veteran gunners ashore to teach the New Englanders; but in spite of the instruction they received, through their careless and reckless handling of the guns several of them burst with dire consequences to the amateur cannoneers. The besiegers and the town kept up a continuous fire upon each other, but the effect was felt more by those in the town than by those outside. Every house within the walls was untenable. Many were destroyed and set on fire. To escape from the deadly fire, the miserable inhabitants were forced to take to the casemates, where they dragged out a wretched existence. Provisions became scarce and powder scarcer. Their condition became critical. The New Englanders steadily advanced their batteries, and although entirely ignorant of the art of making trenches and opening parallels, succeeded in demolishing the circular battery opposite the gate, dismounted many of the guns on the walls, and



"Some 200 men were attached to each sledge by breast straps and ropes, and the guns were dragged over the marshes."

began to make serious breaches therein. Their intrenchments were absurd, but the French made no sortie. Perhaps the commander was afraid to use his mutinous troops outside the walls.

Meanwhile the condition of the besiegers was scarcely more happy. Their powder, so lavishly expended, was running perilously low, and the soldiers had suffered great hardships on account of the lack of everything which goes to make up the proper equipment of an army. They kept up their cheerfulness, however, with creditable zeal, and tenaciously clung to their endeavor, amusing themselves by pitching quoits, shooting at a mark, wrestling, and generally having a good time when not actually at work in the batteries. At one period over 1,500 men were on the sick list at once, most of whom subsequently recovered. The diaries abound with interesting and amusing incidents of the siege. One of the officers gravely records that "One of y^e^ Genls Died who went into an House To plunder and killd himself with drink." During the siege a French captain was made prisoner, and his death is thus recounted by another chronicler: "The French Capt. Died this Day that was wounded & taken y^e^ 17 Day, he offered Ten Thousand Pounds for a fryar to Pardon his Sins before he died and I would have done it my Self as well as any fryar or Priest Living for ½ y^e^ money."

So impressed were Pepperell's men with their prowess that early in the siege, on the 7th of May, they sent a summons to du Chambon demanding an unconditional surrender, to which the French commander replied that the only answer he could make to such a demand would be delivered from the mouth of his guns! A council of war held to consider this doughty reply determined to carry the fortifications by storm, and "laders and Fa Sheene's" (fascines) were prepared for the purpose. The day brought prudence, however, and it was a good thing for the final success of the expedition that at the last moment wiser counsels prevailed, for at that date the attempt certainly would have resulted in disaster, so the cannonade was vigorously resumed.

As a French merchant ship had succeeded in running the blockade and entering the harbor, the mouth of which was commanded by the Island Battery, Pepperell determined that the next step undertaken should be the capture of this battery, mounting thirty guns, seven swivels, and two mortars, and garrisoned by 180 men. The dashing Vaughan, elated with his success at the Royal Battery, offered to undertake the capture with a couple of hundred men. Volunteers were called for, but the party which assembled for the purpose, with the democratic notions which prevailed in the army, discarded Vaughan and elected one of their own number, named Brooks, to take charge. Several attempts were projected, which were hindered by weather conditions, but finally, on the 26th of May, some 450 men in a number of boats made the attempt.

In order to effect a surprise the boatmen discarded their oars and softly paddled the boats over to the island. The surf was breaking heavily upon the only practicable landing-place, and it was found impossible to land more than three boats at a time. The landing was effected without hindrance, however, but when about a third of the attacking force had been drawn up on the beach, some one proposed three cheers, which were given with such a will that they awakened the Frenchmen, who sprang to arms and poured a deadly fire upon them, which was futilely returned. Probably the enthusiast who gave the alarm was drunk—the diaries are replete with statements that so and so was drunk—for although the matter had assumed the appearance of a crusade, there was certainly as much New England rum in the commissary stores as anything else.

Several more boatloads landed on the island, but the great guns from the fort sank some of the remaining boats with their crews and drove off the rest. When the morning broke there was nothing left for the shore party, cut off from its retreat by the defeat of the boats, but to surrender, which they accordingly did. The total loss in killed, wounded, and taken in the expedition amounted to something under 200 men. This was the only French success, and the garrison was much elated thereby.

The undertaking having failed, Pepperell determined to land a party on Lighthouse Point, erect a battery, and thence attack the island. There was a young civil engineer in the army named Richard Gridley, who undertook the work, though he had no military experience. What he learned in this campaign stood his countrymen in good stead years after, for it was he who traced the line of earthwork for that midnight party under Prescott, which threw up the first American intrenchments on Breed's Hill in 1775. The battery was soon in working order, and poured such a concentrated

fire upon the Island Battery that its guns were dismounted or destroyed. The condition of the French was now desperate, and du Chambon at last resolved upon a sortie. He sent the Sieur de Beaubassin with a chosen party of troops, who were joined by eighty Indians, to attack the lighthouse battery. They were met by the New Englanders while still in the woods, defeated with heavy loss, and driven back to their boats, carrying with them a badly wounded commander.

Meanwhile France had made another effort to relieve the town. The ship-of-the-line "Vigilant," sixty-four guns, commanded by the Marquis de la Maisonfort, had been filled with four months' supply of provisions, 1,000 barrels of powder, twenty brass guns, and 300 soldiers, and despatched to Cape Breton. On the 19th day of May the "Vigilant" sighted the blockading squadron. Instead of running directly for the harbor, disregarding everything else, when the chances are that he could have relieved the town, Maisonfort turned aside from his path and attacked the "Shirley Galley." That little vessel, as usual, made a stout resistance, and by a running fight drew the rash Frenchman into the midst of the English blockading squadron, where after a heroic defense and loss of eighty killed and a large number wounded, Maisonfort was compelled to strike his flag. The loss of the powder was fatal to French hopes, and the capture replenished Pepperell's depleted magazines. The "Vigilant" was refitted, manned by 600 New Englanders, and added to Warren's fleet, which had been reënforced from time to time by the arrival of several English ships. By a ruse some time after, the besieging party found means to acquaint du Chambon of the capture of this ship, and with it perished the last hope of the French. They held on desperately for some time longer, however, hoping for the arrival of a relieving fleet.

Warren was getting very impatient over the slow progress of the siege, and finally proposed to enter the harbor with his ships while the army attempted to storm the town. Preparations were made to carry out this bold plan when, on June 15th, the French drums were heard from their dismantled works beating a parley. On the 16th of June, 1745, the great fortress actually capitulated to this assemblage of farmers and fishermen, led by a lumber merchant, and Pepperell had the satisfaction of receiving the keys of Louisbourg in his hand. The incredible had happened! The credit of it all was due to Shirley and Pepperell, though the enterprise which the one planned and the other carried out would not have succeeded had it not been for the efficient blockade maintained by Warren and his ships.

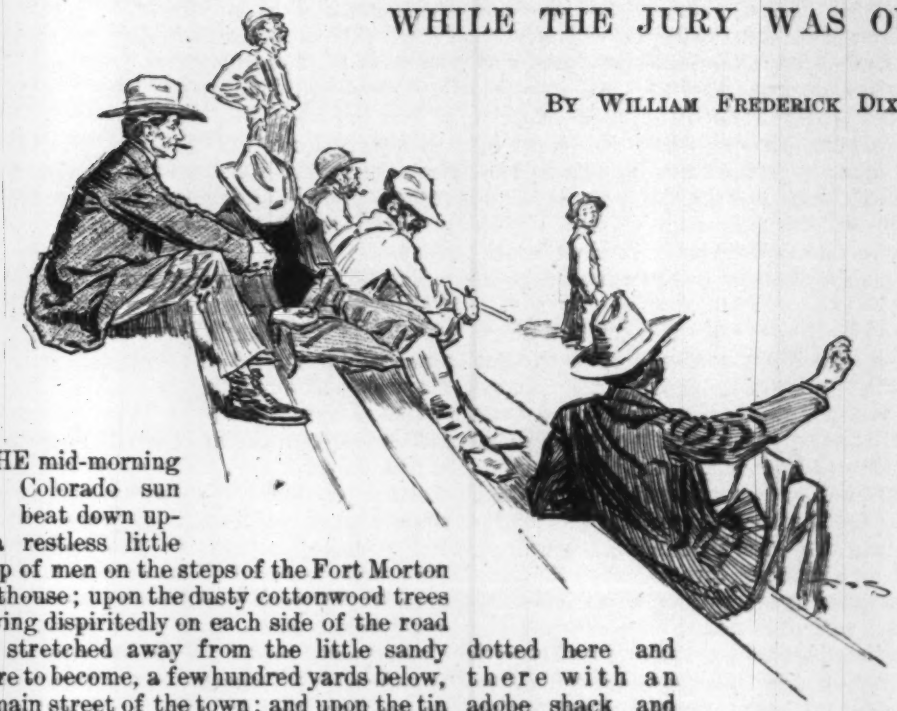
The King was properly grateful. He created Pepperell a baronet and made him a colonel in the English army. Shirley was also made a colonel of a regiment and Warren was promoted to the rank of Admiral. Gallant Captain Rous of the "Shirley Galley" was given a commission of Post Captain in the Royal Navy. The siege had been a picturesque affair, grotesque and amusing when looked at from a distance, but real and earnest enough to the participants. Pepperell deserved all he got; he had spent over 10,000 pounds of his own money in the enterprise. Some time afterwards Massachusetts was repaid for all her expenditures from the Royal Treasury and the finances of the colony were thereby put on a sound basis.

When the army entered the town after the surrender, expecting unlimited plunder, they were very much disgusted at the poverty of the inhabitants and the small booty which awaited them. One diarist records the situation as follows: "A great Noys and hubbub amongst y^e^ Solders a bout y^e^ Plunder; Som Cursing, som a Swarein." I should think so. The wealth of Louisbourg was in its walls, and they were battered to pieces and could not be taken away.

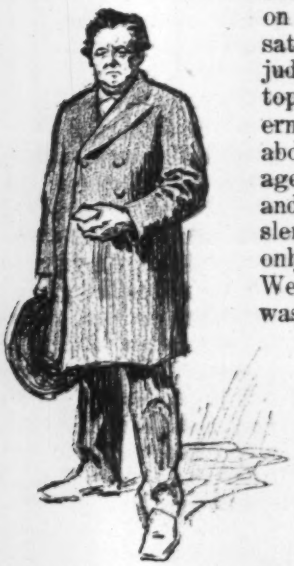
The French in an endeavor to retake the town prepared a great fleet under Admiral d'Anville, who set forth the following year, but the expedition proved the most unfortunate ever undertaken by France. The ships of the fleet were scattered and wrecked by frightful storms, the men died like sheep from disease, and the expedition, never even sighting an enemy, effected nothing, and ended in the most ignominious and heartbreaking disaster. At the peace of Aix-la-Chapelle, however, the work of the brave colonists was rendered of no effect, for by the terms of the treaty, England returned Louisbourg to France. The gigantic undertaking had all to be done over by Amherst, Wolfe, and Boscawen, thirteen years later.

WHILE THE JURY WAS OUT.

By William Frederick Dix.



THE mid-morning Colorado sun beat down upon a restless little group of men on the steps of the Fort Morton courthouse; upon the dusty cottonwood trees growing dispiritedly on each side of the road that stretched away from the little sandy square to become, a few hundred yards below, the main street of the town; and upon the tin roofs of the two-story brick or frame stores on each side of it. The jury had been out over night, and although it was ten o'clock in the morning, had given no sign. The prisoner had not yet been brought up from the county jail near by, and the group of men directly interested in the proceedings were sitting and lounging about the steps, smoking and carrying on desultory conversation. The district judge, sitting on the top step, was an Eastern college man, about forty years of age, once an athlete, and still with a trim, slender figure. The only touch of the Western in his dress was the gray slouch hat worn straight and firmly set upon his brown hair.



Mr. Hackett, "umpire by general acclaim."

"A pretty bit of grazing land," he was saying to the sheriff, as he looked out over the level prairie, dotted here and there with an adobe shack and occasional herds of cattle.

The sheriff, a brawny, blue-shirted young fellow of thirty, with unkempt hair and mustache, uncrossed his booted legs, straightened out one of them, pushed his hand deep into the pocket of his corduroy trousers, and yawned. As his coat was thrust back with the movement, the butt of his forty-four caliber "gun" might be seen. Without replying, he drew out a large silver watch and studied it absently.

The small boys among the group of hangers-on in front of the steps were beguiling themselves tossing ball, and the prosecuting attorney, a young graduate from the East who had come up from Pueblo, called out:

"Here you are, Johnnie, give us a catch!"

The small boy who had the ball grinned sheepishly and threw it at him.

"Harder, harder!" said the young lawyer cheerily. "That's no way to pitch a ball. Throw it this way," and the boy's hands were scorched as he caught the return.

"Say, kin you pitch a curve?" he asked. "Let's see you do it."

"All right," said Hardy, rising good-naturedly and taking off his coat. "Here you go. Hold on," he added, "you couldn't catch it if I did. Here, Mr. Hackett, go out there and let me throw you a few curves."

The others laughed at this, for Hackett, the senior counsel for the defense, also up from Pueblo for the trial, was an enormous, middle-aged Hoosier, six feet two in height, and weighing 250 pounds. He had a mass of crisp black hair, and wore a black broadcloth frock-coat and trousers, low turned-down collar, and ready-made tie. He was slow-moving and ponderous, though forceful and shrewd in his profession; deliberate of speech, and anything but an athlete.

"Here, I'll catch you," exclaimed the junior counsel, Blake, a somewhat lanky, powerfully built Westerner, rising, and depositing his rough brown sack-coat beside Hardy's.

"Gee! you've got muscle," he added, rubbing his hands after the first pass.

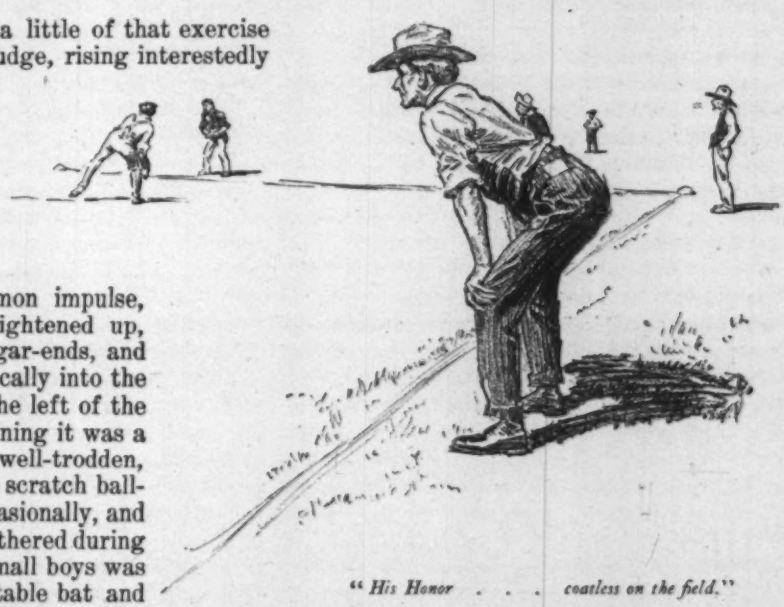
"Hurray!" yelled the small boy, "that was a corker. Git on to them curves, Clarence!" he cried in worshipful admiration.

"Wouldn't mind a little of that exercise myself," said the judge, rising interestedly and hesitating on the steps.

"Why not have a little game while we are waiting?" said Hardy, half jokingly. "Come on, sheriff!"

Moved by a common impulse, the little group brightened up, threw away their cigar-ends, and moved half-apologetically into the sandy square. At the left of the courthouse and adjoining it was a small open field of well-trodden, dusty grass, where a scratch ball-game was played occasionally, and where horses were tethered during court. One of the small boys was despatched for a suitable bat and ball and a catcher's glove, and by the time the sides were arranged, he came racing back with them, highly excited, followed by several other small boys.

No one had the slightest idea of being drawn into a game when he left the steps; but the reaction had worked insidiously. The trial had been a particularly exciting one, and those who had followed it were tired after the three-days' strain in the ill-ventilated courtroom. The sympathies of all had undoubtedly been with the prisoner, although the State had been vigorous in its prosecution and the judge had conscientiously done his duty. Murder had been committed at Jamestown Creek, a few months previously, though a change of venue had been obtained to Fort Morton, the prisoner's own town. Copperthwait had always been a quiet, law-abiding ranchman. He was under thirty years of age, big, broad-shouldered, and swarthy, diffident in manner and somewhat slow of speech, though he had been slowly and thoroughly angered in a quarrel over a bunch of cattle. Six or eight steers had been branded twice, one mark over the other, and the dispute arose over this. Duke, the victim of the shooting, had borne a bad reputation, and the village street was usually more or less uneasy during his infrequent visits. He had killed his man, and had been known to boast of it several times in Flynn's saloon. After this last quarrel, he had sworn to shoot Copperthwait on sight. The quarrel had occurred in the morning. That afternoon Copperthwait had just left the Eagle Hotel, to mount his mustang tied to the hitching-post in front, when Duke happened to turn the corner.



"His Honor . . . coatless on the field."

"Here comes Duke!" a bystander exclaimed. Copperthwait started and caught sight of his adversary. Duke stopped short and put his hand behind him, and Copperthwait, quick as a flash, fired once and put a bullet between Duke's eyes. He had offered no resistance to arrest, and now was in the rough little jail near by, while the twelve good men and true deliberated in the hot back room under the tin roof of the courthouse.

"I guess my hands are a little too soft to play," said the judge good-naturedly, feeling a qualm as to the appropriateness of his joining actively in the sport; "but I'll be umpire, if you want me."

The two teams were quickly formed, the "Comanches" against the "Sioux." The Sioux won the toss and took the field, and the Comanches were struck out in one, two, three order. When the sides changed, Hardy, the prosecuting attorney, took the box, and Blake, the junior counsel for the defense, caught him. After much urging the judge had consented to preside over first base, since Mr. Hackett had positively refused to play, and had been made umpire by general acclaim. As soon as his Honor found himself coatless and on the field, he threw himself into the battle with the greatest enthusiasm.

"Copperthwait came to the bat."

There was many an evidence of "softness" in the condition of the players, and a noticeable tendency to let swift balls go by rather than grapple them with fingers unused to the hard impact. Wild throws to bases were not infrequent, and in consequence there was much base-stealing and hilarious sarcasm from the players on both teams. The official relations of these men were, for the time, lost sight of; they were merely healthy, enthusiastic Americans, feeling the joy of tingling blood in their veins, the zest of friendly competition and of physical exercise.

The runs were frequent and the errors numerous, and at the end of the third inning so many hands were sore, and so many arms growing stiff, that it was mutually decided by the teams to call the next inning the last. The score stood eleven runs for the Comanches (the team made up of Judge Hillier, Hardy, Blake, the keeper of the Eagle Hotel, and one or two other witnesses), and nine for the Sioux, the battery of which was formed by the court clerk and the sheriff, whose heavy long boots, extending far up inside his corduroys, detracted somewhat from any grace of movement he might have had as he lent his entire soul and mind to the clerk's erratic curves, ably backed up by the assistant prosecutor, the stenographer, and several witnesses.

At the beginning of the fourth and concluding inning, the deputy sheriff had come up with the prisoner, who was not handcuffed, and they became interested on-lookers. Copperthwait's nerve had been superb throughout the trial, and he seemed to take an instant interest in the game.

Just after play had commenced Hardy knocked a hot grounder to "short," who fielded the ball swiftly to first base. The baseman caught it, putting Hardy out, and then quietly remarked:

"That settles me. Look at this thumb!"

"See here, old man," Hardy panted, examining it, "it's broken."

"Well, never mind; let somebody take my place. Here, some one—you, Mulligan. Come and take the base. I'm out of it."

"Guess not," said Mulligan, the deputy; "I ain't played ball since——"

"Go on with the game!" cried a dozen others excitedly. "Some one, any one take the base."

"Here, Copperthwait, play first base; we've only got to hold 'em down this inning, and we'll beat 'em easy. There's one out already."

Copperthwait looked uncertainly at the deputy, then at the judge, and quickly pulled off his coat and stepped to the base. His face showed clearly the prison pallor, and this warm sunlight and fresh air seemed wonderfully sweet to his spirit. Taken suddenly away from the active, vigorous life of the ranch, for seven months confined in a dreary prison, the world had seemed gradually to recede from his life. This sudden contrast of green, open field, ringing with the hearty voices of his fellow-men, and the vision of the free, limitless prairie on all sides, was a tragic one to the man. He glanced at the players about him, pausing in the game and thinking only of it.

"Go ahead," he said quietly; "I'll play."

The Comanches failed to make a run during the rest of the inning, and when the Sioux came in they made two runs almost at once, tying the score amid great enthusiasm.

As Copperthwait came to the bat, it was evident that the psychological moment of the sport had arrived. Everything had been completely forgotten save the game, and so intense was the interest that the approach of the court-house janitor was entirely unnoticed. He had come slowly down from the steps, and after a few moments of bewildered surprise stood leaning against a tree near the catcher, watching the prisoner as he slowly moved his bat backward and forward over the plate.

"One ball!" yelled Mr. Hackett, mopping his neck with his handkerchief.

"Two balls!"

"Strike one!"

"Three balls!"

Crack!——

The ball flew straight from the bat high above the right fielder's head, and Copperthwait was safe on second before the ball was fielded in.

The janitor began to grow very uneasy and edged slowly down the field towards the first baseman. The crowd yelled as Copperthwait, still panting, edged off toward third. Hardy turned suddenly and tried to catch him napping, but in his excitement he threw a little wild, the baseman missed it, and Copperthwait reached third amid much uproar. The Sioux were all gathered now in a frantic crowd between third and home, yelling like their prototypes, and the Comanches were also noisy.

"Go it, Copperthwait," shouted his team mates; "get home and you'll win the game! Steady, now! Look out, look out! *Don't* let them catch you!"

"Now, Hardy," pleaded the judge, "for heaven's sake, play ball! Don't let him make this run!"

"Steady, Hardy," said the catcher; "watch my signs."

The janitor had crept up close to first base.

"Say, Judge," he whispered to his Honor, who was now dancing like an Indian, and watching every move of the pitcher and Copperthwait with devouring anxiety—"say, Judge, the jury has come in and is ready with the verdict."

"Oh, to h—— with the jury!" snapped out the judge. "Go on with the game!"

Hardy slammed in the ball straight over the plate, the baseman bunted it for a sacrifice hit, and Copperthwait, who had crept nearly half-way, rushed in and slid triumphantly to the plate on his stomach.

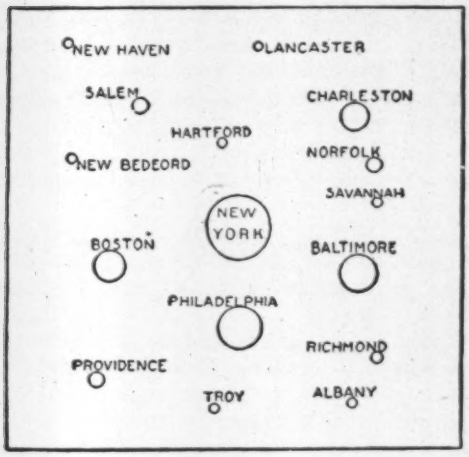
"Safe!" yelled the umpire, and pandemonium broke loose.

"I guess 'safe' 's the word, all right," muttered the janitor to the deputy, who had instantly started for the prisoner. "I had a wink from the foreman of the jury as he come in."

"*Safe!*"

The sixteen cities of a population of over 4000 in 1800. *The twenty leading cities in the United States in 1900.*

It will be seen that fifteen of the twenty leading cities in 1900 had not a population of even 4000 in 1800.



RISE OF THE AMERICAN CITY.

THE WONDERFUL STORY OF THE CENSUS OF 1900.

By Walter Wellman.

THE end-of-the-century census of the United States tells no more wonderful story than the rise of the American city. The face of this good old world of ours never before saw such changes as those which we Americans have beheld, during the century just closed, here upon our Western Continent. In times past, quick movements of population, due to wars, oppressions, enforced migration, discoveries of lands or finds of precious metals, have built up populous communities where waste places stood before. But nothing like the metamorphosis that has come over this vast expanse of country lying between the Atlantic and Pacific oceans was ever dreamed of, much less actually equalled, in the activities of the ancients or of other moderns than ourselves.

There should be some way of setting forth the marvelous facts without choking all the heroics out of them with the dry dust of statistics. Perhaps if we broadly say that in the nineteenth century the people of the United States have multiplied fifteen times, and that in the same period the population of their incorporated cities and towns has multiplied one hundred and fifty times, we may make at least a start toward grasping the greatness of the thing. Yet even this graphic summary does not bring the facts to us with all their possible impressiveness. The census of 1800 showed only thirty-four municipalities in the United States, and that short list included every incorporated village or town, starting with New York, the metropolis, with its 60,000 people, and ending with Erie, Pennsylvania, with its eighty-one inhabitants.

A few simple figures tell the great story of the century:

	1800	1900
Population of the United States	5,308,483	76,303,387
Number of incorporated places	34	10,602
Population of incorporated places	272,137	35,849,516
Urban population, per cent. of whole	5.1	47.1

At the beginning of the century five Americans of one hundred lived in an incorporated city or town; at the end of the century forty-seven of one hundred. The population of incorporated places is now almost equal to the whole population of the country in 1870. It should be borne in mind that these figures are for all municipally-organized places, including many small villages which cannot be regarded as cities; they do not, therefore, present an accurate measurement of the growth of distinctly urban population as distinguished from rural population. It is not easy to say what number of inhabitants is necessary to form a city. Five hundred people living in a vil-

lage in the eastern or central parts of the country may be engaged almost wholly in agricultural pursuits. A like number in a far western town may and often do present all the aspects of true city life; their occupations are wholly commercial or professional. Obviously the line must be drawn somewhere for purposes of analysis and comparison, and it must be drawn the same throughout the country. Previous to 1890 our census officials drew it at 8,000 population—obviously too high. In the two latest censuses places of 4,000 and over have been considered cities. Each reader may determine for himself what constitutes a city, and by reference to the following figures he may ascertain the urban population of the country according to his own standard:

1900	No. of incorporated places.	[Official] Population.	Per cent. of whole population.
Places of 25,000 and over	161	19,757,618	25.9
Places of 8,000 and under 25,000*.	326	4,946,091	6.5
Places of 4,000 and under 8,000	532	2,937,327	3 9
Places of 2,500 and under 4,000	604	1,896,705	2.5
Places of 1,000 and under 2,500	2,130	3,304,700	4.3
Places under 1,000	6,819	3,007,075	4.0
All incorporated places	10,602	35,849,516	47.1

If we assume the official standard of 4,000 as the population requisite for a city, we find that at the beginning of the century there were only sixteen cities in the United States, with a total population of 235,308. At the end of the century there are 1,084 such cities, with a total population of 28,049,593.† In 1800 the sixteen cities were scattered along the Atlantic coast, only two or three lying beyond the odors of the tide-bared sands. In 1900 the 1,084 cities are found throughout the length and breadth of the land, in every one of the fifty contiguous States and Territories, and also in Hawaii, Alaska only being left out of the list. Whereas sixteen cities of 1800 hugged the seaboard of the East, 484 cities are now found in the States bordering that coast, and 519 in the great Mississippi Valley.

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Rank.	1800.		*Rank.*	1830.		*Rank.*	1850.		*Rank.*	1900.	
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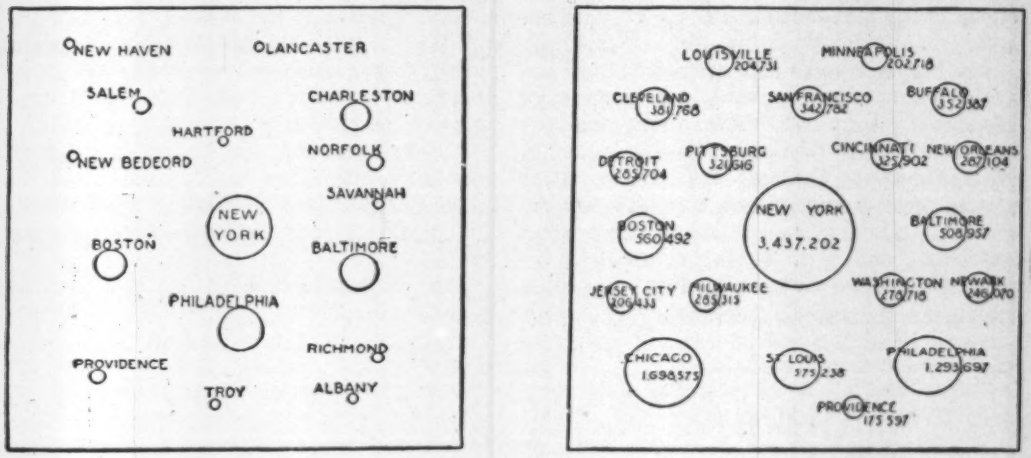
2.	Philadelphia	41,220	2.	Baltimore	80,620	2.	Baltimore	169,054	2.	Chicago	1,698,575
3.	Baltimore	26,514	3.	Philadelphia	80,462	3.	Boston	136,881	3.	Philadelphia	1,293,697
4.	Boston	24,937	4.	Boston	61,392	4.	Philadelphia	121,376	4.	St. Louis	575,238
5.	Charleston	18,924	5.	Charleston	30,289	5.	New Orleans	116,375	5.	Boston	560,892
6.	Salem, Mass.	9,457	6.	New Orleans	29,737	6.	Cincinnati	115,435	6.	Baltimore	508,957
7.	Providence	7,614	7.	Cincinnati	24,831	7.	Brooklyn	96,838	7.	Cleveland	381,768
8.	Norfolk	6,926	8.	Albany	24,209	8.	St. Louis	77,860	8.	Buffalo	352,387
9.	Richmond	5,737	9.	Washington	18,826	9.	Albany	50,763	9.	San Francisco	342,782
10.	Albany	5,349	10.	Providence	16,833	10.	Pittsburg	46,601	10.	Cincinnati	325,902
11.	Hartford	5,347	11.	Richmond	16,060	11.	Louisville	43,194	11.	Pittsburgh	321,616
12.	Savannah	5,166	12.	St. Louis	14,125	12.	Charleston	42,985	12.	New Orleans	287,104
13.	Troy	4,926	13.	Salem	13,895	13.	Buffalo	42,261	13.	Detroit	285,704
14.	New Bedford	4,361	14.	Portland	12,598	14.	Providence	41,513	14.	Milwaukee	285,315
15.	Lancaster	4,292	15.	Pittsburg	12,568	15.	Washington	40,001	15.	Washington	278,718
16.	New Haven	4,049	16.	Brooklyn	12,406	16.	Newark	38,894	16.	Newark	246,070
17.	Taunton	3,860	17.	Troy	11,556	17.	Rochester	36,403	17.	Jersey City	206,433
18.	Portland	3,704	18.	Newark	10,953	18.	Lowell	33,383	18.	Louisville	204,731
19.	Waterbury	3,256	19.	Louisville	10,341	19.	Chicago	29,963	19.	Minneapolis	202,718
20.	Washington	3,210	20.	New Haven	10,180	20.	Troy	28,785	20.	Providence	175,597
	Total	250,338		Total	688,793		Total	1,824,112		Total	11,971,406

The sixteen cities of a population of over 4000 in 1800. *The twenty leading cities in the United States in 1900.*

It will be seen that fifteen of the twenty leading cities in 1900 had not a population of even 4000 in 1800.



RISE OF THE AMERICAN CITY.

THE WONDERFUL STORY OF THE CENSUS OF 1900.

By Walter Wellman.

THE end-of-the-century census of the United States tells no more wonderful story than the rise of the American city. The face of this good old world of ours never before saw such changes as those which we Americans have beheld, during the century just closed, here upon our Western Continent. In times past, quick movements of population, due to wars, oppressions, enforced migration, discoveries of lands or finds of precious metals, have built up populous communities where waste places stood before. But nothing like the metamorphosis that has come over this vast expanse of country lying between the Atlantic and Pacific oceans was ever dreamed of, much less actually equalled, in the activities of the ancients or of other moderns than ourselves.

There should be some way of setting forth the marvelous facts without choking all the heroics out of them with the dry dust of statistics. Perhaps if we broadly say that in the nineteenth century the people of the United States have multiplied fifteen times, and that in the same period the population of their incorporated cities and towns has multiplied one hundred and fifty times, we may make at least a start toward grasping the greatness of the thing. Yet even this graphic summary does not bring the facts to us with all their possible impressiveness. The census of 1800 showed only thirty-four municipalities in the United States, and that short list included every incorporated village or town, starting with New York, the metropolis, with its 60,000 people, and ending with Erie, Pennsylvania, with its eighty-one inhabitants.

A few simple figures tell the great story of the century:

	1800	1900
Population of the United States	5,308,483	76,303,387
Number of incorporated places	34	10,602
Population of incorporated places	272,137	35,849,516
Urban population, per cent. of whole	5.1	47.1

At the beginning of the century five Americans of one hundred lived in an incorporated city or town; at the end of the century forty-seven of one hundred. The population of incorporated places is now almost equal to the whole population of the country in 1870. It should be borne in mind that these figures are for all municipally-organized places, including many small villages which cannot be regarded as cities; they do not, therefore, present an accurate measurement of the growth of distinctly urban population as distinguished from rural population. It is not easy to say what number of inhabitants is necessary to form a city. Five hundred people living in a vil-

lage in the eastern or central parts of the country may be engaged almost wholly in agricultural pursuits. A like number in a far western town may and often do present all the aspects of true city life; their occupations are wholly commercial or professional. Obviously the line must be drawn somewhere for purposes of analysis and comparison, and it must be drawn the same throughout the country. Previous to 1890 our census officials drew it at 8,000 population—obviously too high. In the two latest censuses places of 4,000 and over have been considered cities. Each reader may determine for himself what constitutes a city, and by reference to the following figures he may ascertain the urban population of the country according to his own standard:

1900	No. of incorporated places.	[Official] Population.	Per cent. of whole population.
Places of 25,000 and over	161	19,757,618	25.9
Places of 8,000 and under 25,000*	356	4,946,091	6.5
Places of 4,000 and under 8,000	532	2,937,327	3 9
Places of 2,500 and under 4,000	604	1,896,705	2.5
Places of 1,000 and under 2,500	2,130	3,304,700	4.3
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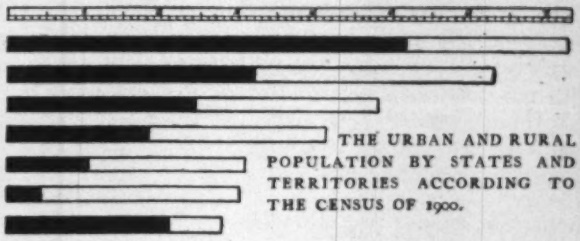
	Total	250,338		Total	688,993		Total	1,894,112		Total	11,971,406

State.	No. of Cities of 4,000 and over.	Per Cent. Urban.
New York	83	71.3
Pennsylvania	119	51.1
Illinois	66	51.0
Ohio	83	45.9
Missouri	35	34.9
Texas	36	15.0
Massachusetts	56	76.1
Indiana	52	30.7
Michigan	55	37.2
Iowa	33	20.5
Georgia	19	14.3
Kentucky	20	19.6
Wisconsin	37	34.5
Tennessee	9	14.1
North Carolina	17	8.0
New Jersey	49	67.6
Virginia	16	16.5
Alabama	16	9.9
Minnesota	19	30.9
Mississippi	10	5.3
California	24	48.9
Kansas	25	9.2
Louisiana	9	25.1
South Carolina	16	11.7
Arkansas	8	6.9
Maryland	8	48.2
Nebraska	11	7.1
West Virginia	11	11.6
Connecticut	31	68.5
Maine	21	33.4
Colorado	8	41.2
Florida	6	16.6
Washington	8	36.4
Rhode Island	10	81.2
Oregon	5	27.6
New Hampshire	11	41.8
South Dakota	5	7.1
Oklahoma	2	5.3
Indian Territory	2	2.5
Vermont	9	20.0
North Dakota	2	5.4
District of Columbia	1	100.0
Utah	4	29.5
Montana	5	29.6
New Mexico	2	6.1
Delaware	1	41.6
Idaho	2	6.2
Hawaii	1	25.1
Arizona	2	10.7
Wyoming	3	28.8
Alaska	....	....
Nevada	1	10.7



THE URBAN AND RURAL POPULATION BY STATES AND TERRITORIES ACCORDING TO THE CENSUS OF 1900.

delphia, while Baltimore, Boston, and Charleston were eager rivals. Salem, Massachusetts, was the sixth city of the country, and Washington, the fledgeling capital, barely squeezed into the list as a village of 3,000. By 1830 New Orleans came upon the scene as a result of the first great act of American expansion, the acquisition of Louisiana. The appearance of Cincinnati, St. Louis, Louisville, and Pittsburg gave hint of the coming greatness of the vast interior.

At the half-way mile-post of the century, New York had greatly increased its lead over all rivals. For the first time, the American continent had a city of a half-million people. New Orleans and Cincinnati had come into rivalry with Philadelphia and Boston. Baltimore had forged far ahead of her nearest competitor, and was the second city of the Union. St. Louis had outstripped Albany, and Pittsburg and Louisville had passed Charleston. It was not till the census of '50 that the region of the great lakes made anything more than a nominal bid for recognition; Buffalo took rank next to the former cotton metropolis of South Carolina, giving suggestion of the mightier things to come from the shores of the fresh seas. A modest nineteenth on the list stood Chicago, which had first risen above the obscurity of its prairie swamps, and shown itself, in the census of 1840, as a village of 4,470 souls.

Fifty years later, in 1900, there were fifteen cities each of which had a greater population than the twenty together a hundred years ago. The aggregate population of the twenty principal places in the United States was nearly 12,000,000. New York alone had a population exceeding that of the twenty leading cities together (including New York) at the beginning of the Civil War. Since 1870 the population of the United States has approximately doubled; in the same period

the population of cities has multiplied by three and one-half.

It was not until 1820 that the United States contained a city of the first class—100,000 population or over. Now there are thirty-eight such cities in the republic—a greater number than is to be found in any other country. The United Kingdom is next with thirty-five cities of the first rate. It is a remarkable fact that about one of five Americans now lives in a city of 100,000 or more population. We have here a quick and exceedingly interesting glimpse of the growth in number and population of the cities of first rank during the past eighty years:

NUMBER AND POPULATION OF CITIES OF 100,000 OR MORE.

Census year.	No. of Cities.	Population.	Per cent. of whole pop'n.
1900	38	14,308,347	18.62
1890	28	9,697,960	15.48
1880	20	6,241,240	12.44
1870	14	4,129,989	10.71
1860	9	2,627,858	8.36
1850	6	1,174,667	5.06
1840	3	517,216	3.03
1830	1	197,112	1.53
1820	1	123,706	1.28

The urban population of the United States is very unevenly distributed. Nearly one-half of it (47.3 per cent.) lies in the North Atlantic Division, embracing New England, New York, Pennsylvania, and New Jersey. One-third of it (33.4 per cent.) lies in the North Central Division, embracing Ohio in the east, Missouri and Kansas in the southwest, and Nebraska and the Dakotas in the west and northwest. This leaves less than one-fifth to the remainder of the country, and this remnant is almost equally divided between the three geographical divisions—the South Atlantic States (Delaware, Maryland, District of Columbia, West Virginia, Virginia, the Carolinas, Georgia, and Florida), the South Central Division (Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Texas, Oklahoma, and Indian Territory), and the Western Division, embracing the mountain and Pacific coast region.

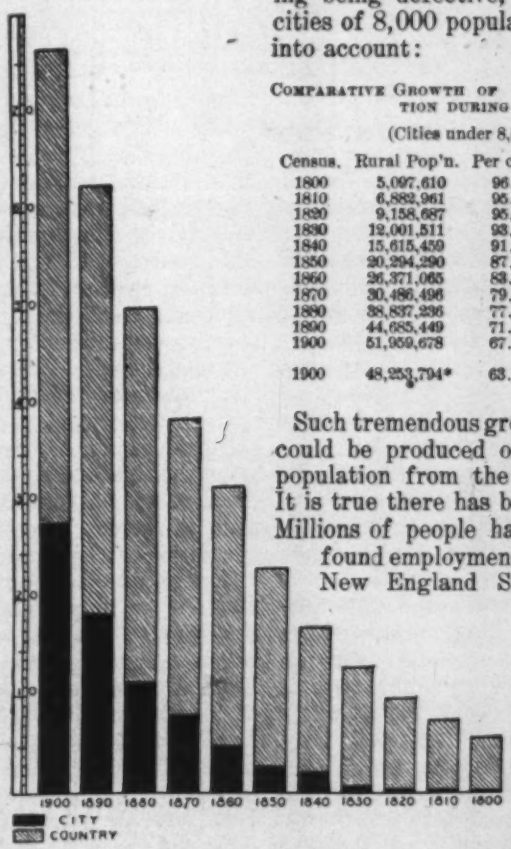


Diagram showing the relative growth of the urban and rural population throughout the United States. The scale is ten millions to the half inch.

Excepting the District of Columbia, which for census purposes is all urban, Rhode Island has the largest percentage of city population—rather more than eight-tenths. Massachusetts is second, New York third, Connecticut fourth, New Jersey fifth, Pennsylvania sixth. Illinois leads the Western States, with a trifle more than one-half of all her population in the cities. The Southern States are low in urban population, Mississippi having the smallest percentage of all the States of the Union. Some of the far Western States, like California, Utah, and Montana, show a surprisingly large percentage of urban residents.

The comparative rate of growth of the urban and rural population is graphically shown in the following table, the urban showing being defective, however, because only cities of 8,000 population or over are taken into account:

COMPARATIVE GROWTH OF URBAN AND RURAL POPULATION DURING THE CENTURY.

(Cities under 8,000 not included.)

Census.	Rural Pop'n.	Per cent.	Urban Pop'n.	Per cent.
1800	5,097,610	96.03	210,873	3.97
1810	6,882,961	95.07	356,920	4.93
1820	9,158,687	95.07	475,135	4.93
1830	12,001,511	93.28	864,509	6.72
1840	15,615,459	91.48	1,453,994	8.52
1850	20,294,290	87.51	2,897,586	12.49
1860	26,371,065	83.87	5,072,256	16.13
1870	30,486,496	79.07	8,071,875	20.93
1880	38,837,236	77.43	11,318,547	22.57
1890	44,685,449	71.36	17,936,801	28.64
1900	51,959,678	67.60	24,703,709	32.40
1900	48,253,794*	63.20	28,049,593	36.80

Such tremendous growth of American cities could be produced only by a movement of population from the country to the town. It is true there has been such a movement. Millions of people have left the farms and found employment in the cities. In the New England States and along the North Atlantic seaboard generally, this movement has been so marked that only three States out of nine are left with a majority of their population outside the limits of cities.

* Including cities of 4,000 or over; also thirty-five New England towns of 8,000 or over.

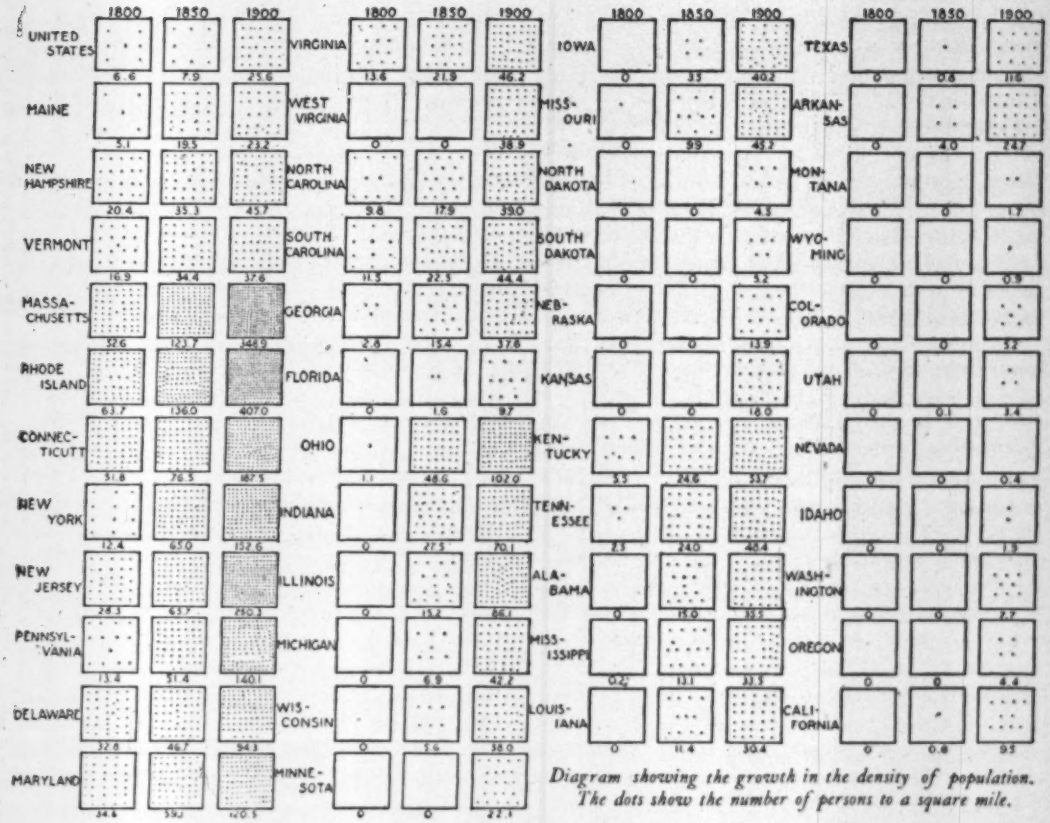

1800 1850 1900
UNITED STATES 6.6 7.9 25.6
MAINE 5.1 19.5 23.2
NEW HAMPSHIRE 20.4 35.3 45.7
VERMONT 16.9 34.4 37.6
MASSACHUSETTS 32.6 123.7 346.9
RHODE ISLAND 63.7 136.0 407.0
CONNECTICUT 31.8 76.5 187.5
NEW YORK 12.4 63.0 152.6
NEW JERSEY 28.3 63.7 250.3
PENNSYLVANIA 13.4 31.4 140.1
DELAWARE 32.6 46.7 94.3
MARYLAND 34.6 59.1 120.5
VIRGINIA 13.6 21.9 46.2
WEST VIRGINIA 0 0 38.9
NORTH CAROLINA 9.8 17.9 39.0
SOUTH CAROLINA 11.5 22.5 44.4
GEORGIA 2.8 15.4 37.8
FLORIDA 0 1.6 9.7
OHIO 1.1 48.6 102.0
INDIANA 0 27.5 70.1
ILLINOIS 0 15.2 86.1
MICHIGAN 0 6.9 42.2
WISCONSIN 0 5.6 38.0
MINNESOTA 0 0 22.1
IOWA 0 33 40.2
MISSOURI 0 9.9 45.2
NORTH DAKOTA 0 0 4.3
SOUTH DAKOTA 0 0 5.2
NEBRASKA 0 0 13.9
KANSAS 0 0 16.0
KENTUCKY 5.5 24.6 53.7
TENNESSEE 2.3 24.0 48.4
ALABAMA 0 15.0 33.5
MISSISSIPPI 0.2 13.1 33.5
LOUISIANA 0 11.4 30.4
TEXAS 0 0.6 11.6
ARKANSAS 0 4.0 24.7
MONTANA 0 0 1.7
WYOMING 0 0 0.9
COLORADO 0 0 5.2
UTAH 0 0.1 3.4
NEVADA 0 0 0.4
IDAHO 0 0 1.9
WASHINGTON 0 0 7.7
OREGON 0 0 4.4
CALIFORNIA 0 0.8 9.5

Diagram showing the growth in the density of population. The dots show the number of persons to a square mile.

The wonderful development of the United States as a manufacturing nation has inevitably drawn people to the centers of population. Cable and electric cars have enabled cities to spread, to extend their boundaries, to embrace large populations which otherwise must have remained suburban, and therefore have been classed as rural for census purposes. As the people have gained in wealth, as successive generations of families have profited through inheritance from the toil and savings of their predecessors, increasing numbers have sought the comforts and conveniences of city life. A large percentage of immigration from foreign lands has naturally stopped in the cities.

But there is another and a most interesting side to the story. City activities have at their base the needs and demands of the rural population. If the country regions had not vastly broadened their requirements the great growth of the cities would have been impossible. The needs, purchasing power, and actual consumption of the rural people have multiplied many times more rapidly than that population itself. Life in the country has become complex—that is, the farmers participate in the good things of the times, just as the dwellers in the cities do, only perhaps to a somewhat lesser degree. Therefore the fast uplifting of the giant cities is a monument to the higher civilization of the rural regions. Cities cannot live wholly upon one another any more than a community composed entirely of Chinese laundrymen could thrive by taking in the neighborhood washing. If the cities of the United States have waxed many and mighty, it is because the country behind and around them is productive and prosperous—it bears the great golden harvest from the soil to the city gate, it returns laden with the fabrications and wares of the urban center.

American cities are gaining population much more rapidly than the country, but the country has not stopped growing. It will be a sad day for America when it does. England's decadence began with the decline of English agriculture. For a long time English industry throve by taking in other peoples' washing; but now each nation is learning to do its own laundry work. There is in some quarters an impression that the cities of the United States are swallowing the country; that the farming population has ceased to multiply; that all the farmers'

sons and daughters are running away to town to work in factories and go to picnics on trolley cars. It is not so. Every census shows a growth of the rural population, and a pretty steady, wholesome growth it is. At the end of the century there are nearly ten times as many people in the rural districts as at its beginning, and more than twice as many as at the mid-century enumeration of 1850. It is indeed a country of phenomenal growth that can show such a high rate of gain in both the urban centers and the rural fields.

Labor-saving machinery and improved processes have been working their magic in country as well as city. Forty years ago the time of human labor required on an average to produce one bushel of corn was four hours and thirty-four minutes; now it is forty-one minutes. The cost of the human labor to produce this bushel has declined from thirty-five and three-quarter cents to ten and one-half cents. It is one of the marvels of the age that to-day the amount of human labor required to produce a bushel of wheat, from beginning to end is, on an average, only ten minutes, whereas in 1850 the time was three hours. The cost of the human labor required to produce this bushel of wheat has declined from seventeen and three-quarter cents to three and one-third cents. Forty years ago, when men mowed the grass with scythes, spread it and turned it over for drying with pitchforks, raked it into windrows with a hand-rake, cocked it with a pitchfork, and baled it with a hand-press, the time of human labor required per ton of hay was thirty-five and one-half hours; now with horse-mowers, horse-rakes, and horse-presses the human labor required per ton is eleven hours and thirty-four minutes; the labor cost has fallen from $3.06 to $1.29 per ton. The economic results of the use of improved machinery upon the farm might be illustrated by similar citations as to all the crops which the country produces. But it is not necessary. We are more concerned with the broad effects.

What are these broad effects? In 1850 the rural population of the United States was 20,000,000. In 1900, according to the face of the returns, it is forty-eight millions. But if we eliminate the 5,000,000 of people who live in towns and villages of between 4,000 and 1,000 population, very few of whom are engaged in agriculture, only 43,000,000 will be left—a truer measure. In other words, the rural population has a little more than doubled in the half century. Yet note the vastly greater output of the farms of 1900 compared with those of 1850: Corn, four times as much; wheat, six to eight times as much; oats, five times as much; barley, eleven times as much; cotton, eight times as much; wool, six times as much; hay, pork, beef, mutton, chickens, eggs, butter, from twenty to one hundred times as much. The number of farm workers has only doubled; the quantity and value of farm-produce has been multiplied by twenty. Now we know why so many men can be spared to go from the farm to the factory without interfering with national prosperity; here we discover how it is that the cities of America can multiply by ten in the same half century that the farming community is multiplying by two, and that without any false proportions or insecure foundations for the great industrial structure to stand upon.

KIM.

By Rudyard Kipling.

CHAPTER XIII.—(*Continued*).

THE lama shook his head slowly and began to fold up the Wheel. The Russian, on his side, saw no more than an unclean old man haggling over a dirty piece of paper. He drew out half a handful of rupees, and snatched half-jestingly at the chart, which tore in the lama's grip. A low murmur of horror went up from the coolies—some of whom were Spiti men and, by their lights, good Buddhists. The lama rose at the insult; his hand went to the heavy iron pencase that is the priest's weapon, and the Babu danced in agony.

"Now you see—you see why I wanted witnesses. They are highly unscrupulous people. Oh, Sar! Sar! You must *not* hit holy man!"

"*Chela!* He has defiled the Written Word!"

It was too late. Before Kim could ward him off, the Russian struck the old man full on the face. Next instant he was rolling over and over down hill with Kim at his

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throat. The blow had waked every unknown Irish devil in the boy's blood, and the sudden fall of his enemy did the rest. The lama dropped to his knees, half-stunned; the coolies under their loads fled up the hill as fast as plainsmen run across the level. They had seen sacrilege unspeakable, and it behooved them to get away before the Gods and devils of the hills took vengeance. The Frenchman ran towards the lama, fumbling at his revolver with some notion of making him a hostage for his companion. A shower of cutting stones—hillmen are very straight shots—drove him away, and a coolie from Ao-chung snatched the lama into the stampede. All came about as swiftly as the sudden mountain darkness.

"They have taken the baggage and all the guns," yelled the Frenchman, firing blindly into the twilight.

"All right, Sar! All right! Don't shoot. I go to rescue," and Hurree, pounding down the slope, cast himself bodily upon the delighted and astonished Kim, who was banging his breathless foe's head against a boulder.

"Go back to the coolies," whispered the Babu in his ear. "They have the baggage. The papers are in the *kilta* with the red top, but look through all. Take their papers, and especially the *murasla*. Go! The other man comes!"

Kim tore up hill. A revolver-bullet rang on a rock by his side, and he cowered partridge-wise.

"If you shoot," shouted Hurree, "they will descend and annihilate us. I have rescued the gentleman, Sar. This is par*tic*ularly dangerous."

"By Jove!" Kim was thinking hard in English. "This is a dam-tight place, but *I* think it is self-defence." He felt in his bosom for Mahbub's gift, and uncertainly—save for a few practice shots in the Bikaner desert, he had never used the little gun—pulled trigger.

"What did I say, Sar!" The Babu seemed to be in tears. "Come down here and assist to resuscitate. We are all up a tree, I tell you."

The shots ceased. There was a sound of stumbling feet, and Kim hurried upward through the gloom, swearing like a cat—or a country-bred.

"Did they wound thee, *chela?*" called the lama above him.

"No. And thou?" He dived into a clump of stunted firs.

"Unhurt. Come away. We go with these folk to Shamlegh-under-the-Snow."

"But not before we have done justice," a voice cried. "I have got the Sahib's guns—all four. Let us go down."

"He struck the Holy One—we saw it! Our cattle will be barren—our wives will cease to bear! The snows will slide upon us as we go home. . . . On top of all other oppression, too!"

The little fir-clump filled with clamoring coolies—panic-stricken, and in their terror capable of anything. The man from Ao-chung clicked the breech-bolt of his gun impatiently, and made as to go down hill.

"Wait a little, Holy One; they cannot go far; wait till I return."

"It is this person who has suffered wrong," said the lama, his hand over his brow.

"For that very reason," was the reply.

"If this person overlooks it, your hands are clean. Moreover, ye acquire merit by obedience."

"Wait, and we will all go to Shamlegh together," the man insisted.

For a moment, for just so long as it needs to stuff a cartridge into a breech-loader, the lama hesitated. Then he rose to his feet, and laid a finger on the man's shoulder.

"Hast thou heard? I say there shall be no killing—I who was Abbot of Such-zen. Is it any lust of thine to be re-born as a rat, or a snake under the eaves—a worm in the belly of the most mean beast? Is it thy wish to——"

The man from Ao-chung fell to his knees, for the voice boomed like a Tibetan devil-gong.

"Ai! ai!" cried the Spiti men. "Do not curse us—do not curse him. It was but his zeal, Holy One! . . . Put down the rifle, fool!"

"Anger on anger! Evil on evil! There will be no killing. Let the priest-beaters go in bondage to their own acts. Just and sure is the Wheel, swerving not a hair! They will be born many times in torment." His head drooped, and he leaned heavily on Kim's shoulder.

"I have come near to great evil, *chela*," he whispered in that dead hush under the pines. "I was tempted to loose the bullet; and truly, in Tibet there would have been a heavy and a slow death for them. . . . He struck me across the face . . . upon the flesh . . ." He slid to the ground, breathing heavily, and Kim could hear the over-driven heart bump and check.

"Have they hurt him to the death?"

said the Ao-chung man, while the others stood mute.

Kim knelt over the body in deadly fear. "Nay," he cried passionately, "this is only a weakness." Then he remembered that he was a white man, with a white man's camp-fittings at his service. "Open the *kiltas!* The Sahibs may have a medicine."

"Oho! Then I know it," said the Ao-chung man with a laugh. "Not for five years was I Yankling Sahib's *shikarri* without knowing that medicine. I too have tasted it. Behold!"

He drew from his breast a bottle of cheap whisky—such as is sold to explorers at Leh—and cleverly forced a little between the lama's teeth.

"So I did when Yankling Sahib twisted his foot beyond Astor. Aha! I have already looked into their baskets—but we will make fair division at Shamlegh. Give him a little more. It is good medicine. Feel! His heart goes better now. Lay his head down and rub a little on the chest. If he had waited quietly while I accounted for the Sahibs this would never have come. But perhaps the Sahibs may chase us here. Then it would not be wrong to shoot them with their own guns, heh?"

"One is paid, I think, already," said Kim between his teeth "I kicked him in the groin as he went down hill. Would I had killed him!"

"It is well to be brave when one does not live in Rampur," said one whose hut lay within a few miles of the Rajah's rickety palace. "If we get a bad name among the Sahibs, none will employ us as *shikarris* any more."

"Oh, but these are not Angrezi Sahibs—not merry-minded men like Fostum Sahib or Yankling Sahib. They are foreigners—they cannot speak Angrezi as do Sahibs."

Here the lama coughed and sat up, groping for the rosary.

"There shall be no killing," he murmured. "Just is the Wheel! Evil on evil——"

"Nay, Holy One. We are all here." The Ao-chung man timidly patted his feet. "Except by thy order no one shall be slain. Rest a while. We will make a little camp here, and later, as the moon rises, we go to Shamlegh-under-the-Snow."

"After a blow," said a Spiti man sententiously, "it is best to sleep."

"There is, as it were, a dizziness at the back of my neck, and a pinching in it. Let me lay my head on thy lap, *chela*. I am an old man, but not free from passion. . . . We must think of the Cause of Things."

"Give him a blanket. We dare not light a fire lest the Sahibs see."

"Better get away to Shamlegh. None will follow us to Shamlegh."

This was the nervous Rampur man.

"I have been Fostum Sahib's *shikarri*, and I am Yankling Sahib's *shikarri*. I should have been with Yankling Sahib now but for this cursed *beegar* (the *corvée*). Let two men watch below with the guns lest the Sahibs do more foolishness. *I* shall not leave this Holy One."

They sat down a little apart from the lama, and, after listening awhile, passed round a water-pipe whose receiver was an old Day and Martin blacking-bottle. The glow of the red charcoal as it went from hand to hand lit up the narrow, blinking eyes, the high Chinese cheek-bones, and the bull-throats that melted away into the dark duffle folds round the shoulders. They looked like kobolds from some magic mine—gnomes of the hills in conclave. And while they talked, the voices of the snow-waters round them diminished one by one as the night-frost choked and clogged the runnels.

"How he stood up against us!" said a Spiti man, admiring. "I remember an old ibex, out Ladakh-way, that Dupont Sahib missed on a shoulder-shot, seven seasons back, standing up just like him. Dupont Sahib was a good *shikarri*."

"Not as good as Yankling Sahib." The Ao-chung man took a pull at the whisky-bottle and passed it over. "Now hear me—unless any other man thinks he knows more."

The challenge was not taken up.

"We go to Shamlegh when the moon rises. There we will fairly divide the baggage between us. I am content with this new little rifle and all its cartridges."

"Are the bears only bad on thy holding?" said a mate, sucking at the pipe.

"No; but musk-pods are worth six rupees apiece now, and thy women can have the canvas of the tents and some of the cooking-gear. We will do all that at Shamlegh before dawn. Then we all go our ways, remembering that we have never seen or taken service with these Sahibs, who may, indeed, say that we have stolen their baggage."

"That is well for thee, but what will our Rajah say?"

"Who is to tell him? Those Sahibs, who cannot speak our talk, or the Babu who for his own ends gave us money? Will *he* lead

an army against us? What evidence will remain? That we do not need we shall throw on Shamlegh-midden, where no man has yet set foot."

"Who is at Shamlegh this summer?" The place was only a grazing centre of three or four huts.

"The Woman of Shamlegh. *She* has no love for Sahibs, as we know. The others can be pleased with little presents; and here is enough for us all." He patted the fat sides of the nearest basket.

"But—but——"

"I have said they are not true Sahibs. All their skins and heads were bought in the bazar at Leh. *I* know the marks. I showed them to ye last March."

"True. They were all bought skins and heads. Some had even the moth in them."

That was a shrewd argument, and the Ao-chung man knew his fellows.

"If the worst comes to the worst, I shall tell Yankling Sahib, who is a man of a merry mind, and he will laugh. We are not doing any wrong to any Sahibs whom we know. *They* are priest-beaters. They frightened us. We fled! Who knows where we dropped the baggage? Do ye think Yankling Sahib will permit down-country police to wander all over the hills, disturbing his game? It is a far cry from Simla to Chini, and farther from Shamlegh to Shamlegh-midden."

"So be it, but I carry the big *kilta*. The basket with the red top that the Sahibs pack themselves every morning."

"Thus it is proved," said the Shamlegh man adroitly, "that they are Sahibs of no account. Who ever heard of Fostum Sahib, or Yankling Sahib, or even the little Peel Sahib that sits up of nights to shoot serow—I say, who ever heard of these Sahibs coming into the hills without a down-country cook, and a bearer, and—and all manner of well-paid, high-handed and oppressive folk in their tail? How can they make trouble? What of the *kilta?*"

"Nothing, but that it is full of the Written Word—books and papers in which they wrote, and strange instruments, as of worship."

"Shamlegh-midden will take them all."

"True! But how if we insult the Sahibs' Gods thereby? I do not like to handle the Written Word in that fashion. And their brass idols are beyond my comprehension. It is no plunder for simple hill-folk."

"The old man still sleeps. Hst! We will ask his *chela*." The Ao-chung man refreshed himself, and swelled with pride of leadership.

"We have here," he whispered, "a *kilta* whose nature we do not know."

"But I do," said Kim cautiously. The lama drew breath in natural, easy sleep, and Kim had been thinking of Hurree's last words. As a player of the Great Game, he was disposed just then to reverence the Babu. "It is a *kilta* with a red top full of very wonderful things, not to be handled by fools."

"I said it; I said it," cried the bearer of that burden. "Thinkest thou it will betray us?"

"Not if it be given to me. I will draw out its magic. Otherwise it will do great harm."

"A priest always takes his share." Whisky was demoralizing the Ao-chung man.

"It is no matter to me," Kim answered, with the craft of his mother-country. "Share it among you, and see what comes!"

"Not I. I was only jesting. Give the order. There is more than enough for us all. We go our way from Shamlegh in the dawn."

They arranged and re-arranged their artless little plans for another hour, while Kim shivered with cold and pride. The humor of the situation tickled the Irish and the Oriental in his soul. Here were the emissaries of the dread power of the North, very possibly as great in their own land as Mahbub or Colonel Creighton, suddenly smitten helpless. One of them, he privately knew, would be lame for a time. They had made promises to Kings. To-night they lay out somewhere below him, chartless, foodless, tentless, gunless—except for Hurree Babu, guideless. And this collapse of their Great Game (Kim wondered to whom they would report it), this panicky bolt into the night, had come about through no craft of Hurree's or contrivance of Kim's, but simply, beautifully, and inevitably as the capture of Mahbub's *faquir*-friends by the zealous young policeman at Umballa.

"They are there—with nothing; and, by Jove, it is cold! I am here with all their things. Oh, they will be angry! I am sorry for Hurree Babu."

Kim might have saved his pity, for though at that moment the Bengali suffered acutely in the flesh, his soul was puffed and lofty. A mile down the hill on the edge of the pine forest, two half-frozen men—one powerfully sick at intervals—were varying mutual recriminations with the most poignant abuse

of the Babu, who seemed distraught with terror. They demanded a plan of action. He explained that they were very lucky to be alive; that their coolies, if not then stalking them, had passed beyond recall; that the Rajah, his master, was ninety miles away, and, so far from lending them money and a retinue for the Simla journey, would surely cast them into prison if he heard that they had hit a priest. He enlarged on this sin and its consequences till they bade him change the subject. Their one hope was unostentatious flight from village to village till they reached civilization: and, for the hundredth time dissolved in tears, he demanded of the high stars why the Sahibs "had beaten holy man."

Ten steps would have taken Hurree into the creaking gloom utterly beyond their reach—to the shelter and food of the nearest village, where glib-tongued doctors were scarce. But he preferred to endure cold, belly-pinch, bad words, and occasional blows in the company of his honoured employers. Crouched against a tree-trunk, he sniffed dolefully.

"And have you thought," said the uninjured man hotly, "what sort of spectacle we shall present wandering through these hills among these aborigines?"

Hurree Babu had thought of little else for some hours, but the remark was not to his address.

"We cannot wander! I can hardly walk," groaned Kim's victim.

"Perhaps the holy man will be merciful in loving-kindness, Sar, otherwise——"

"I promise myself a peculiar pleasure in emptying my revolver into that young bonze when next we meet," was the unchristian answer.

"Revolvers! Vengeance! Bonzes!" Hurree crouched lower. The war was breaking out afresh. "Have you no consideration for our loss? The baggage! The baggage!" He could hear the speaker literally dancing on the grass "Everything we bore! Everything we have secured! Our gains! Eight months' work! Do you know what that means? 'Decidedly it is we who can deal with Orientals!' Oh, you have done well."

They fell to it in several tongues, and Hurree smiled. Kim was with the *kiltas*, and in the *kiltas* lay eight months of good diplomacy. There was no means of communicating with the boy, but he could be trusted. For the rest, he could stage-manage the journey through the hills so that Hilás, Bunár, and four hundred miles of hillroads should tell the tale for a generation. Men who cannot control their own coolies are little respected in the Hills, and the hillman has a very keen sense of humour.

"If I had done it myself," thought Hurree, "it would not have been better; and, by Jove, now I think of it, of course I arranged it myself. How quick I have been! Just when I ran down hill I thought it! Thee outrage was accidental, but onlee me could have worked it—ah—for all it was dam well worth. Consider the moral effect upon these ignorant people! No treaties—no papers—no written documents at all—and *me* to interpret for them. How I shall laugh with the Colonel! I wish I had their papers also: but you cannot occupy two places in space simultaneously. That is axiomatic."

CHAPTER XIV.

My brother kneels (so saith Kabir)
To stone and brass in heathen-wise,
But in my brother's voice I hear
My own unanswered agonies.
His god is what his Fates assign—
His prayer is all the world's and mine.—*Kabir.*

AT moonrise the cautious coolies got under way. The lama, refreshed by his sleep and the spirit, needed no more than Kim's shoulder to bear him along—a silent, swift-striding man. They held the shale-sprinkled grass for an hour, swept round the shoulder of an immortal cliff, and climbed into a new country entirely blocked off from all sight of Chini valley. A huge pasture-ground ran up fan-shaped to the living snow. At its base was perhaps half an açre of flat land, on which stood a few soil and timber huts. Behind them—for, hill-fashion, they were perched on the edge of all things—the ground fell sheer two thousand feet to Shamlegh-midden, where never man has yet set foot.

The men made no motion to divide the plunder till they had seen the lama bedded down in the best room of the place, with Kim shampooing his feet, Mohammedan fashion.

"We will send food," said the Ao-chung man, "and the red-topped *kilta*. By dawn there will be none to give evidence, one way or the other. If anything is not needed in the *kilta*—see here!"

He pointed through the window—opening into space that was filled with moonlight reflected from the snow—and threw out an empty whisky-bottle.

"No need to listen for the fall. This is the world's end," he said, and swung off. The lama looked forth, a hand on either sill, with eyes that shone like yellow opals. From the enormous pit before him white peaks lifted themselves yearning to the moonlight. The rest was as the darkness of interstellar space.

"These," he said slowly, "are indeed my Hills. Thus should a man abide, perched above the world, separated from delights, considering vast matters."

"Yes; if he has a *chela* to prepare tea for him, and to fold a blanket for his head, and to chase out calving cows."

A smoky lamp burned in a niche, but the full moonlight beat it down; and by the mixed light, stooping above the food-bag and cups, Kim moved like a tall ghost.

"Ai! But now I have let the blood cool my head still beats and drums, and there is a cord round the back of my neck."

"No wonder. It was a strong blow. May he who dealt it——"

"But for my own passions there would have been no evil."

"What evil? Thou hast saved the Sahibs from death they deserved a hundred times."

"The lesson is not well learnt, *chela*." The lama came to rest on a folded blanket, as Kim went forward with his evening routine. "The blow was but a shadow upon a shadow. Evil in itself—my legs weary apace these latter days!—it met evil in me—anger, rage, and a lust to return evil. These wrought in my blood, woke tumult in my stomach, and dazzled my ears." Here he drank scalding block-tea ceremonially, taking the hot cup from Kim's hand. "Had I been passionless, the evil blow would have done only bodily evil—a scar, or a bruise—which is illusion. But my mind was *not* abstracted, for rushed in straightway a lust to let the Spiti men kill. In fighting that lust, my soul was torn and wrenched beyond a thousand blows. Not till I had repeated the Blessings (he meant the Buddhist Beatitudes) did I achieve calm. But the evil planted in me by that moment's carelessness works out to its end. Just is the Wheel, swerving not a hair! Learn the lesson, *chela*."

"It is too high for me," Kim muttered. "I am still all shaken. I am glad I hurt the man."

"I felt that sleeping upon thy knees, in the wood below. It disquieted me in my dreams—the evil in thy soul working through to mine. Yet on the other hand"—he loosed his rosary—"I have acquired merit by saving two lives—the lives of those that wronged me. Now I must see into the Cause of Things. The boat of my soul staggers."

"Sleep, and be strong. That is wisest."

"I meditate: there is a need greater than thou knowest."

Till the dawn, hour after hour, as the moonlight paled on the high peaks, and that which had been belted blackness on the sides of the far hills showed as tender green forest, the lama stared fixedly at the wall. From time to time he groaned. Outside the barred door, where discomfited kine came to ask for their old stable, Shamlegh and the coolies gave itself up to plunder and riotous living. The Ao-chung man was their leader, and once they had opened the Sahibs, tinned foods and found that they were very good they dared not turn back. Shamlegh kitchen-midden took the dunnage.

When Kim, after a night of bad dreams, stole forth to brush his teeth in the morning chill, a fair-coloured woman with turquoise-studded headgear drew him aside.

"The others have gone. They left thee this *kilta* as the promise was. I do not love Sahibs, but thou wilt make us a charm in return for it. We do not wish little Shamlegh to get a bad name on account of the—accident. I am the Woman of Shamlegh." She looked him over with bold, bright eyes, unlike the usual furtive glance of hill-women.

"Assuredly. But it must be done in secret."

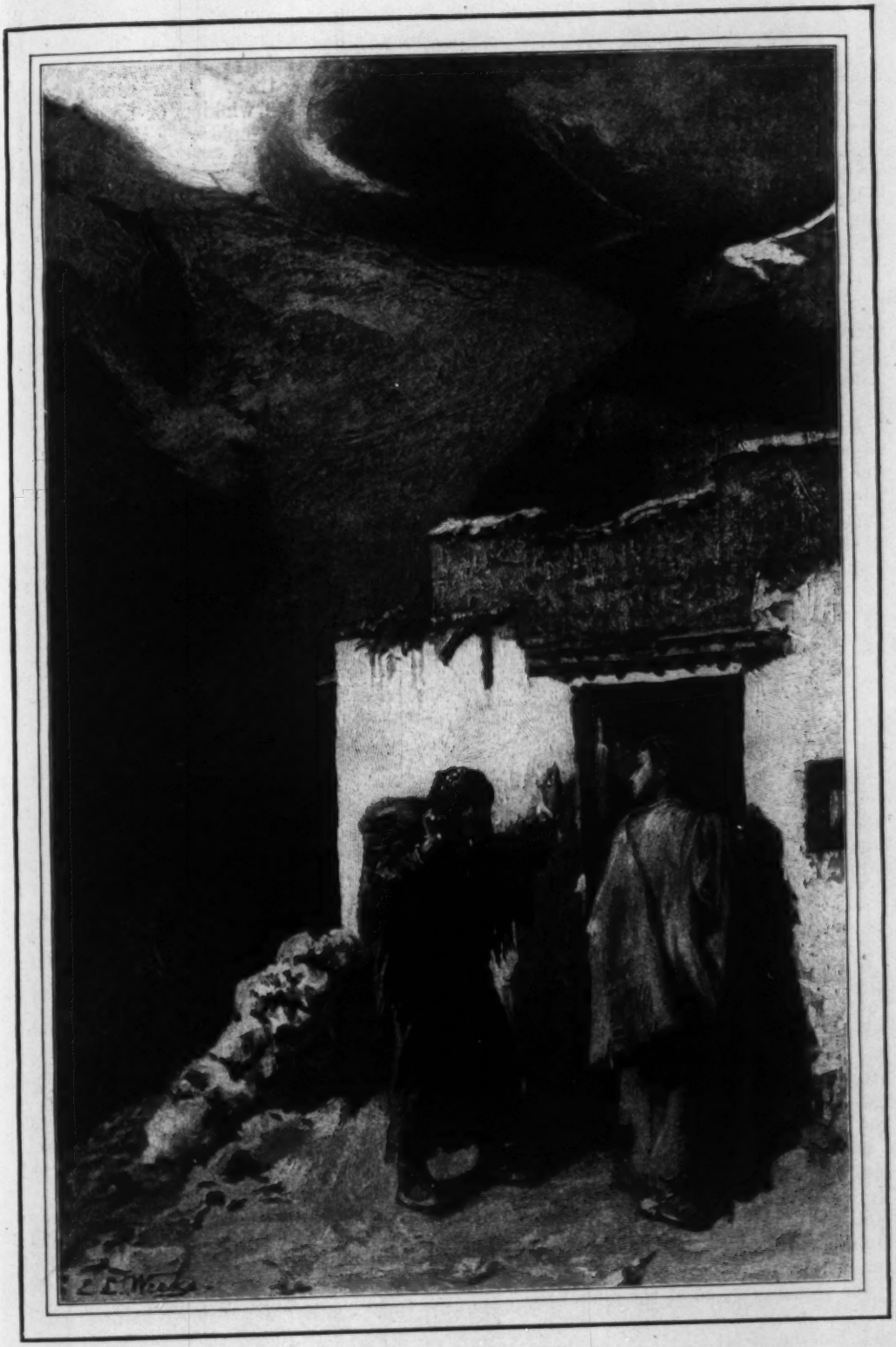
She raised the heavy *kilta* like a toy and slung it into her own hut.

"Out and bar the door! Let none come near till it is finished."

"But afterwards—we may talk."

Kim tilted the *kilta* on the floor—a cascade of Survey instruments, books, diaries, letters, maps, and queerly scented native correspondence. At the very bottom was an embroidered bag covering a sealed, gilded, and illuminated document such as one king sends to another. Kim caught his breath with delight, and reviewed the situation from a Sahib's point of view.

"The books I do not want. Besides, they are logarithms—Survey, I suppose." He laid them aside. "The letters I do not understand, but Colonel Creighton will. They must all be kept. The maps—they draw better maps than me—*of* course. All the native letters—oho!—and particularly the *murasla*." He sniffed the embroidered bag. "That must be from Hilás or Bunár,



"THE WORLD'S END."

and Hurree Babu spoke truth. By Jove! It is a fine haul. I wish Hurree could know. . . . The rest must go out of the window." He fingered a superb prismatic compass and the shiny top of a theodolite. But after all, a Sahib cannot very well steal, and the things might be inconvenient evidence later. He sorted out every scrap of manuscript, every map, and the native letters. They made one softish slab. The three locked ferril-backed books, with five worn pocket-books, he put aside.

"The letters and the *murasla* I must carry inside my coat and under my belt, and the hand-written books I must put into the food-bag. It will be very heavy. No. I do not think there is anything more. If there is, the coolies have thrown it down the *khud*, so *thatt* is all right. Now you go too." He repacked the *kilta* with all he meant to lose, and hove it up on to the window-sill. A thousand feet below lay a long, lazy, round-shouldered bank of mist, as yet untouched by the morning sun. A thousand feet below that was an hundred-year-old pine-forest. He could see the green tops looking like a bed of moss when a wind-eddy thinned the cloud.

"No! I don't think any one will go after *you!*"

The wheeling basket vomited its contents as it dropped. The theodolite hit a jutting cliff-ledge and exploded like a shell; the books, inkstands, paint-boxes, compasses, and rulers showed for a few seconds like a swarm of bees. Then they vanished; and, though Kim, hanging half out of the window, strained his young ears, never a sound came up from the gulf.

"Five hundred—a thousand rupees could not buy them," he thought sorrowfully. "It was verree wasteful, but I have all their other stuff—everything they did—I hope. Now how the deuce am I to tell Hurree Babu, and *whatt* the deuce am I to do? And my old man is sick. I must tie up the letters in oilcloth. That is something to do first—else they will get all sweated. . . . And I am all alone!" He bound them into a neat packet, swedging down the stiff, sticky oilcloth at the corners: his roving life had made him as methodical as an old hunter in matters of the road. Then with double care he packed away the books at the bottom of the food-bag.

The woman rapped at the door.

"But thou hast made no charm," she said, looking about.

"There is no need." Kim had completely overlooked the necessity for a little patter-talk. The woman laughed at his confusion irreverently.

"None—for thee. Thou canst cast a spell by the mere winking of an eye. But think of us poor people when thou art gone! They were all too drunk last night to hear a woman Thou art not drunk?"

"I am a priest." Kim had recovered himself, and, the woman being aught but unlovely, thought best to stand on his office.

"I warned them that the Sahibs will be angry and will make an inquisition and a report to the Rajah. There is also the Babu with them. Clerks have long tongues."

"Is that all thy trouble?" The plan rose fully formed in Kim's mind, and he smiled ravishingly.

"Not all," quoth the woman, putting out a hard brown hand all covered with turquoises set in silver.

"I can finish that in a breath," he went on quickly. "The Babu is the very *hakim* (thou hast heard of him) who was wandering among the hills by Ziglaur. I know him."

"He will tell for the sake of a reward. Sahibs cannot distinguish one hillman from another, but Babus have eyes for men—and women."

"Carry a word to him from me."

"There is nothing I would not do for thee."

He accepted the compliment calmly, as men must in lands where women make the love, tore a leaf from a note-book, and with a patent indelible pencil wrote in gross Shikast—the script that bad little boys use when they write dirt on walls: "*I have everything that they have written: their pictures of the country, and many letters. Especially the* murasla. *Tell me what to do. I am at Shamlegh-under-the-Snow. The old man is sick.*"

"Take this to him. It will altogether shut his mouth. He cannot have gone far."

"Indeed no. They are still in the forest across the spur. Our children went to watch them when the light came, and have cried the news as they moved."

Kim looked his astonishment; but from the edge of the sheep pasture floated a shrill, kite-like trill. A child tending cattle had picked it up from a brother or sister on the far side of the slope that commanded Chini valley.

"My husbands are also out there gathering wood." She drew a handful of walnuts

from her bosom, split one neatly, and began to eat. Kim affected blank ignorance.

"Dost thou not know the meaning of the walnut—priest?" she said coyly, and handed him the half-shells.

"Well thought of." He slipped the piece of paper between them quickly. "Hast thou a little wax to close them on this letter?"

The woman sighed aloud, and Kim relented.

"There is no payment till service has been rendered. Carry this to the Babu, and say it was sent by the Son of the Charm."

"Ai! Truly! Truly! By a magician—who is like a Sahib."

"Nay. Son of the Charm: and ask if there be any answer."

"But if he offer a rudeness? I—I am afraid."

Kim laughed. "He is, I have no doubt, very cold and very hungry. The hills make cold bed-fellows. Hai, my"—it was on the tip of his tongue to say Mother, but he turned it to Sister—"thou art a wise and witty woman. By this time all the villages know what has befallen the Sahibs—eh?"

"True. News was at Ziglaur by midnight, and by to-morrow should be at Kotgarh. The villages are both afraid and angry."

"No need. Tell the villages to feed the Sahibs and pass them on, in peace. We must get them quietly away from our valleys. To steal is one thing—to kill another. The Babu will understand, and there will be no after-complaints. Be swift. I must tend my master when he wakes."

"So be it. After service—thou hast said?—comes the reward. I am the Woman of Shamlegh, and I hold from the Rajah. I am no common bearer of babes. Shamlegh is thine: hoof and horn and hide; milk and butter. Take or leave."

She turned resolutely uphill, her silver necklaces clicking on her broad breast, to meet the morning sun fifteen hundred feet above them. This time Kim thought in the vernacular as he waxed down the oilskin edges of the packets.

"How can a man follow the Way or the Great Game when he is eternally pestered by women? There was that girl at Akrola by the Ford; and there was the scullion's wife behind the dovecot—not counting the others—and now comes this one! When I was a child it was well enough, but now I am a man and they will not regard me as a man. Walnuts indeed! Ho! ho! It is almonds in the Plains!"

He went out to levy on the village—not with a begging-bowl, which might do for down-country, but in the manner of a prince. Shamlegh's summer population is only three families—four women and eight or nine men. They were all full of tinned meats—and mixed drinks, from ammoniated quinine to white vodka—for they had taken their full share in the overnight loot. The neat Continental tents had been cut up and shared long ago, and there were patent aluminium saucepans abroad.

But they considered the lama's presence a perfect safeguard against all consequences, and impenitently brought Kim of their best—even to a drink of *chang*—the barley-beer that comes from Ladakh-way. Then they thawed out in the sun, and sat with their legs hanging over infinite abysses, chattering, laughing, and smoking. They judged India and its Government solely from their experience of wandering Sahibs who had employed them or their friends as *shikarris*. Kim heard tales of shots missed against ibex, serow, or markhor, by Sahibs twenty years in their graves—every detail lighted from behind like twigs on tree-tops seen against lightning. They told him of their little diseases, and, more important, the diseases of their tiny, sure-footed cattle; of trips as far as Kotgarh, where the strange missionaries live, and beyond even to marvellous Simla, where the streets are paved with silver, and any one, look you, can get service with the Sahibs, who ride about in two-wheeled carts and spend money with a spade. Presently, grave and aloof, walking very heavily, the lama joined himself to the chatter under the eaves, and they gave him great room. The thin air refreshed him, and he sat on the edge of precipices with the best of them, and, when talk languished, flung pebbles into the void. Thirty miles away, as the eagle flies, lay the next range, seamed and channelled and pitted with little patches of brush-forests, each a day's dark march. Behind the village, Shamlegh hill itself cut off all view to southward. It was like sitting in a swallow's nest under the eaves of the roof of the world.

From time to time the lama stretched out his hand, and with a little, low-voiced prompting would point out the road to Spiti and north across the Parungla.

"Beyond, where the hills lie thickest, lies De-ch'en" (he meant Han-lé), "the great Monastery. s'Tag-stan-ras-ch'en built it, and of him there runs this tale." Whereupon he told it: a fantastic piled narrative

of bewitchment and miracles that set Shamlegh agasping. Turning west a little, he speered for the green hills of Kulu, and sought Kailung under the glaciers. "For thither came I in the old, old days. From Leh I came, over the Baralachi."

"Yes, yes; we know it," said the far-faring people of Shamlegh.

"And I slept two nights with the priests of Kailung. These are the hills of my delight! Shadows blessed above all other shadows! There my eyes opened on this world; there my eyes were opened to this world; there I found Enlightenment; and there I girt my loins for my Search. Out of the Hills I came—the high Hills and the strong winds. Oh, just is the Wheel!" He blessed them in detail—the great glaciers, the naked rocks, the piled moraines and tumbled shale; dry upland, hidden salt-lake, age-old timber and fruitful water-shot valley one after the other, as a dying man blesses his folk, and Kim marvelled at his passion.

"Yes—yes. There is no place like our hills," said the people of Shamlegh. And they fell to wondering how a man could live in the hot terrible Plains where the cattle run as big as elephants, unfit to plough on a hillside; where village touches village, they had heard, for a hundred miles; where folk went about stealing in gangs, and what the robbers spared the Police carried utterly away.

So the still forenoon wore through, and at the end of it Kim's messenger dropped from the steep pasture as unbreathed as when she had set out.

"I sent a word to the *hakim*," Kim explained, while she made reverence.

"He joined himself to the idolaters? Nay, I remember he did a healing upon one of them. He has acquired merit, though the healed employed his strength for evil. Just is the Wheel! What of the *hakim?*"

"I feared that thou hadst been bruised and—and I knew he was wise." Kim took the waxed walnut-shell and read in English on the back of his note: "*Your favor received. Cannot get away from present company at present, but shall take them into Simla. After which, hope to rejoin you. Inexpedient to follow angry gentleman. Return by same road you came, and will overtake. Highly gratified about correspondence due to my forethought.*" "He says, Holy One, that he will escape from the idolaters, and will return to us. Shall we wait awhile at Shamlegh, then?"

The lama looked long and lovingly upon the hills and shook his head.

"That may not be, *chela*. From my bones outward I do desire it, but it is forbidden. I have seen the Cause of Things."

"Why? When hills gave thee back thy strength day by day? Remember we were weak and fainting down below there in the Doon."

"I became strong to do evil and to forget. A brawler and a swashbuckler upon the hillsides was I." Kim bit back a smile. "Just and perfect is the Wheel, swerving not a hair. When I was a man—a long time ago—I did pilgrimage to Guru Ch'wan among the poplars" (he pointed Bhotanwards), "where they keep the Sacred Horse."

"Quiet, be quiet!" said Shamlegh, all arow. "He speaks of Jam-lin-nin-k'or, the Horse That Can Go Round The World In a Day."

"I speak to my *chela* only," said the lama, in gentle reproof, and they scattered like frost on south eaves of a morning. "I did not seek truth in those days, but the talk of doctrine. All illusion! I drank the beer and ate the bread of Guru Ch'wan. Next day one said: 'We go out to fight Sangor Gutok down the valley to discover (mark again how Lust is tied to Anger!) which abbot shall bear rule in the valley, and take the profit of the prayers they print at Sangor Gutok.' I went, and we fought a day."

"But how, Holy One?"

"With our long pen-cases as I have shown. . . . I say, we fought under the poplars both abbots and all the monks, and one laid open my forehead to the bone. See!" He tilted back his cap and showed a puckered silvery scar. "Just and perfect is the Wheel! Yesterday the scar itched, and after fifty years I recalled how it was dealt and the face of him who dealt it; dwelling a little in illusion. Followed that which thou didst see—strife and stupidity. Just is the Wheel! The idolater's blow fell upon the scar. Then I was shaken in my soul: my soul was darkened, and the boat of my soul rocked upon the waters of illusion. Not till I came to Shamlegh could I meditate upon the Cause of Things, or trace the running grass-roots of Evil. I strove all the long night."

"But, Holy One, thou art innocent of all evil. May I be thy sacrifice!"

Kim was genuinely distressed at the old man's sorrow, and Mahbub Ali's phrase slipped out unawares.

"In the dawn," he went on more gravely,

"'I AM THE WOMAN OF SHAMLEGH.'"

the ready rosary clicking between the slow sentences, "came enlightenment. It is here. . . . I am an old man . . . hill-bred, hill-fed, never to sit down among my hills. Three years I travelled through Hind, but—can earth be stronger than Mother Earth? My stupid body yearned to the Hills and the snow of the Hills, from below there. I said, and it is true, my Search is sure? So, at the Kulu woman's house I turned hillward, over-persuaded by myself. There is no blame to the *hakim*. He—following Desire—foretold that the Hills would make me strong. They strengthened me to do evil, to forget my Search. I delighted in life and the lust of life. I desired strong slopes to climb. I cast about to find them. I measured the strength of my body, which is evil, against the high hills. I made a mock of thee when thy breath came short under Jamnotri. I jested when thou wouldst not face the snow of the pass."

"But what harm? I *was* afraid. It was just. I am not a hillman; and I loved thee for thy new strength."

"More than once I remember," he rested his cheek dolefully on his hand, "I sought thy praise and the *hakim's* for the mere strength of my legs. Thus evil followed evil till the cup was full. Just is the Wheel! All Hind for three years did me all honour. From the Fountain of Wisdom in the Wonder House to"—he smiled—"a little child playing by a big gun—the world prepared my road. And why?"

"Because we loved thee. It is only the fever of the blow. I myself am still sick and shaken."

"No! It was because I was upon the Way—tuned as are *si-nen* (cymbals) to the purpose of the Law. I departed from that ordinance. The tune was broken: followed the punishment. In my own hills, on the edge of my own country, in the very place of my evil desire, comes the buffet—here!" (He touched his brow.) "As a novice is beaten when he misplaces the cups, so am I beaten, who was abbot of Such-zen. No word, look you, but a blow, *chela*."

"But the Sahibs did not know thee, Holy One?"

"We were well matched. Ignorance and Lust met Ignorance and Lust upon the road, and they begat Anger. The blow was a sign to me, who am no better than a strayed yak, that my place is not here. Who can read the Cause of an act is half-way to Freedom! 'Back to the path,' says the Blow. 'The hills are not for thee. Thou canst not choose Freedom and go in bondage to the delight of life.'"

"If we had never met that thrice-cursed Russian!"

"Our Lord Himself cannot make the Wheel swing backward. And for my merit that I had acquired I gain yet another sign." He put his hand in his bosom, and drew forth the Wheel of Life. "Look! I considered this after I had meditated. There remains untorn by the idolater no more than the breadth of my finger-nail."

"I see."

"So much, then, is the span of my life in this body. I have served the Wheel all my days. Now the Wheel serves me. But for the merit I have acquired in guiding thee upon the Way, there would have been added to me yet another life ere I had found my River. Is it plain, *chela?*"

Kim stared at the brutally disfigured chart. From left to right diagonally the rent ran—from the Eleventh House where Desire gives birth to the Child (as it is drawn by Tibetans), across the human and animal worlds—to the Fifth House—the empty House of the Senses. The logic was unanswerable.

"Before our Lord won enlightenment," the lama folded all away with reverence, "He was tempted. I too have been tempted, but it is finished. The Arrow fell in the Plains—not in the Hills. Therefore, what make we here?"

"Shall we at least wait for the *hakim?*"

"I know how long I live in this body. What can a *hakim* do?"

"But thou art all sick and shaken. Thou canst not walk."

"How can I be sick if I see Freedom?" He rose unsteadily to his feet.

"Then I must get food from the village. Oh, the weary Road!" Kim felt that he too needed rest.

"That is lawful. Let us eat and go. The Arrow fell in Plains . . . but I yielded to Desire. Make ready, *chela*."

Kim turned to the woman with the turquoise head-gear who had been idly pitching pebbles over the cliff. She smiled very kindly.

"I found him like a strayed buffalo in a corn-field—the Babu; snorting and sneezing with cold. He was so hungry that he forgot his dignity and gave me sweet words. The Sahibs have nothing." She flung out an empty palm. "One is very sick about the stomach. Thy works?"

Kim nodded, with a bright eye.

"I spoke to the Bengali first—and to the

people of a nearby village after. The Sahibs will be given food as they need it—nor will the people ask money. The plunder is already distributed. That Babu makes lying speeches to the Sahibs. Why does he not leave them?"

"Out of the greatness of his heart."

"'Was never a Bengali yet had one bigger than a dried walnut. But it is no matter. . . . Now as to walnuts. After services comes reward. I have said the village is thine."

"It is my loss," Kim began. "Even now I had planned desirable things in my heart which"—there is no need to go through the compliments proper to these occasions. He sighed deeply. . . . "But my master, led by a vision——"

"Huh! What can old eyes see except a full begging-bowl?"

"—turns from this village to the plains again."

"Bid him stay."

Kim shook his head. "I know my Holy One, and his rage if he be crossed," he replied impressively. "His curses shake the Hills."

"Pity they did not save him from a broken head! I heard that thou wast the tiger-hearted one who smote the Sahib. Let him dream a little longer. Stay!"

"Hill woman," said Kim, with austerity that could not harden the outlines of his young oval face, "these matters are too high for thee."

"The Gods be good to us! Since when have men and women been other than men and women?"

"A priest is a priest. He says he will go upon this hour. I am his *chela*, and I go with him. We need food for the Road. He is an honoured guest in all the villages, but"—he broke into a pure boy's grin—"the food here is good. Give me some."

"What if I do not give it thee? I am the woman of this village."

"Then I curse thee—a little—not greatly, but enough to remember." He could not help smiling.

"Thou hast cursed me already by the down-dropped eyelash and the uplifted chin. Curses? What should I care for mere words?" She clenched her hands upon her bosom. . . . "But I would not have thee to go in anger, thinking hardly of me—a gatherer of cow-dung and grass at Shamlegh, but still a woman of substance."

"I think nothing," said Kim, "but that I am grieved to go, for I am very tired, and that we need food. Here is the bag."

The woman snatched it angrily. "I was foolish," said she. "Who is thy woman in the plains? Fair or black? I was fair once. Laughest thou? Once, long ago, if thou canst believe, a Sahib looked on me with favour. Once, long ago, I wore European clothes at the Mission-house yonder." She pointed towards Kotgarh. "Once, long ago, I was *Ker-lis-ti-an* and spoke English—as the Sahibs speak it. Yes. My Sahib said he would return and wed me—yes, wed me. He went away—I had nursed him when he was sick—but he never returned. Then I saw that the Gods of the Kerlistians lied, and I went back to my own people. . . . I have never set eyes on a Sahib since. (Do not laugh at me. The fit is past, little priestling.) Thy face and thy walk and thy fashion of speech put me in mind of my Sahib, though thou art only a wandering mendicant to whom I give a dole. Curse me? Thou canst neither curse nor bless!" She set her hands on her hips and laughed bitterly. "Thy Gods are lies; thy works are lies; thy words are lies. There are no Gods under all the heavens. I know it. . . . But for awhile I thought it was my Sahib come back, and he was my God. Yes, once I made music on a *pianno* in the Mission-house at Kotgarh. Now I give alms to priests who are *heatthen*." She wound up with the English word, and tied the mouth of the brimming bag.

"I wait for thee, *chela*," said the lama, leaning against the door-post.

The woman swept the tall figure with her eyes. "He walk! He cannot cover half a mile. Whither would old bones go?"

At this Kim, already perplexed by the lama's collapse and foreseeing the weight of the bag, fairly lost his temper.

"What is it to thee, woman of ill-omen, where he goes?"

"Nothing—but something to thee, priest with a Sahib's face. Wilt thou carry him on thy shoulders?"

"I go to the plains. None must hinder my return. I have wrestled with my soul till I am strengthless. The stupid body is spent, and we are far from the plains."

"Behold!" she said simply, and drew aside to let Kim see his own utter helplessness. "Curse me. May be it will give strength. Make a charm! Call on thy great God. Thou art a priest." She turned away.

The lama had squatted limply, still holding by the door-post. One cannot strike

down an old man that he recovers again like a boy in a night. Weakness bowed him to the earth, but his eyes that hung on Kim were alive and imploring.

"It is all well," said Kim. "It is the thin air that weakens thee. In a little while we go! It is the mountain-sickness. I too am a little sick at stomach," . . . and he knelt and comforted with such poor words as came first to his lips. Then the woman returned, more erect than ever.

"Thy Gods useless, heh? Try mine. *I* am the Woman of Shamlegh." She hailed hoarsely, and there came out of a cow-pen her two husbands and three others with a *dooli*, the rude native litter of the Hills, that they use for carrying the sick and for visits of state. "These cattle," she did not condescend to look at them, "are thine for so long as thou shalt need."

"But we will not go Simla-way. We will not go near the Sahibs," cried the first husband.

"They will not run away as the others did, nor will they steal baggage. Two I know for weaklings. Stand to the rear-pole, Sonoo and Taree." They obeyed swiftly. "Lower now, and lift in that holy man. I will see to the village and your virtuous wives till ye return."

"When will that be?"

"Ask the priests. Do not pester me. Lay the food-bag at the foot, it balances better so."

"Oh, Holy One, thy Hills are kinder than our Plains!" cried Kim, relieved, as the lama tottered to the litter. "It is a very king's bed—a place of honour and ease. And we owe it to——"

"A woman of ill-omen. I need thy blessings as much as I do thy curses. It is *my* order and none of thine. Lift and away! Here! Hast thou money for the road?"

She beckoned Kim to her hut, and stooped above a battered English cash-box under her cot.

"I do not need anything," said Kim, angered where he should have been grateful. "I am already rudely loaded with favours."

She looked up with a curious smile and laid a hand on his shoulder. "At least, thank me. I am foul-faced and a hillwoman, but, as thy talk goes, I have acquired merit. Shall I show thee how the Sahibs render thanks?" and her hard eyes softened.

"I am but a wandering priest," said Kim, his eyes lighting in answer. "Thou needest neither my blessings nor my curses."

"Nay. But for one little moment—thou canst overtake the *dooli* in ten strides—*if* thou wast a Sahib, shall I show thee what thou wouldst do?"

"How if I guess, though?" said Kim, and putting his arm round her waist, he kissed her on the cheek, adding in English: "Thank you verree much, my dear."

Kissing is practically unknown among Asiatics, which may have been the reason that she leaned back with wide-open eyes and a face of panic.

"Next time," Kim went on, "you must not be so sure of your heathen priests. Now I say good-bye." He held out his hand English-fashion. She took it mechanically. "Good-bye, my dear."

"Good-bye, and—and"—she was remembering her English words one by one—"you will come back again? Good-bye, and—thee God bless you."

Half an hour later, as the creaking litter jolted up the hill path that leads south-easterly from Shamlegh, Kim saw a tiny figure at the hut door waving a white rag.

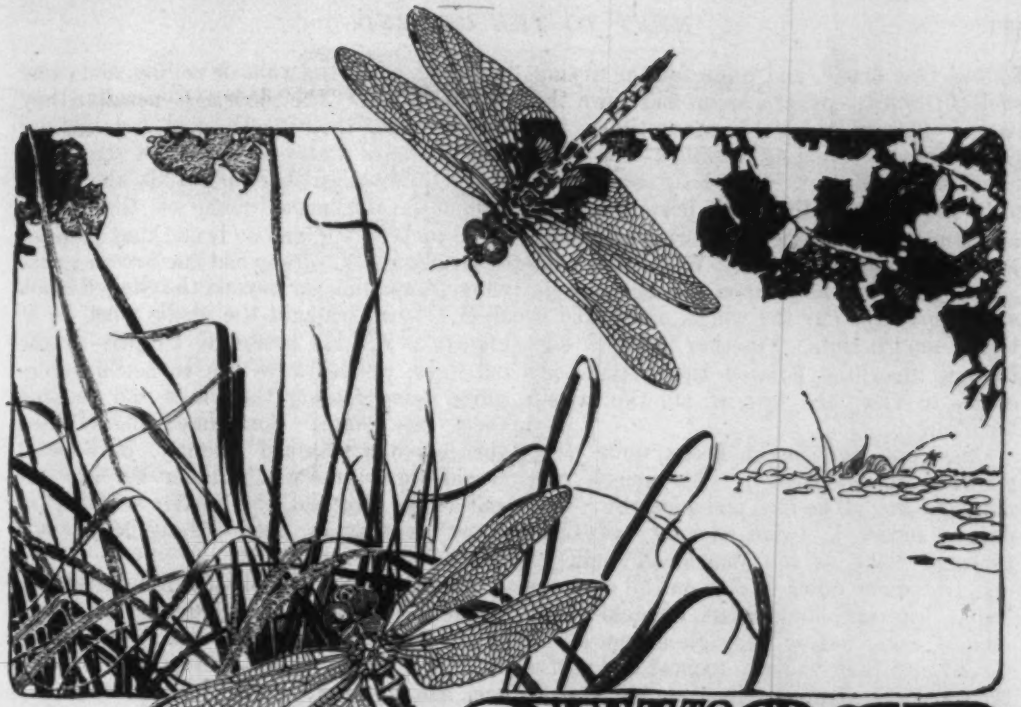
"She has acquired merit beyond all others," said the lama. "For to set a man upon the way to Freedom is half as great as though she had herself found it."

"Umm," said Kim thoughtfully, considering the past. "It may be that I have acquired merit also. . . . At least she did not treat me like a child." He hitched the front of his robe, where lay the slab of documents and maps, restowed the precious food-bag at the lama's feet, laid his hand on the litter edge, and buckled down to the slow pace of the grunting husbands.

"These also acquire merit," said the lama, after three miles.

"More than that, they shall be paid in silver," quoth Kim. The Woman of Shamlegh had given it to him; and it was only fair, he argued, that her men should earn it back again.

(To be continued.)



NEXT TO THE GROUND

STORIES AND SCENES OF FARM LIFE

MARTHA McCULLOCH-WILLIAMS

INSECTS:

MOST book-wise people know as the dragon-fly the insect that hunts mosquitoes down, and devours the pests as it flies. But Joe called it the snake-doctor, and he and Patsy never felt that it was really summer until they had seen one. Joe was familiar with the early life of the snake-doctor, which begins active existence as a horribly ugly and very fat white grub. The grub, known variously as hellgrammite, mud-hawk, twist-tail, dobson, is the most killing bait for trout. Possibly this comes from the fact that at some stages of its existence the hellgrammite lives in water, hence may seem to the trout a titbit properly in place.

Hellgrammites that escape bait-hunters, 'possums, and minks end by changing into longish pupa-cases, very much bulkier at one end than the other. From these cases there emerge the perfect snake-doctors, with long, round, iridescent bodies, green or brown, and swelling lumpishly where they join the double wings. These wings are gauzy, but incredibly strong. The snake-doctor flies with the speed of the swiftest bird. Negroes say the snake-doctor's business in life is to help snakes cast the skin. However that may be, the White Oaks children took delight in seeing the glittering creatures dart and flash over pastures, meadows, and round about ponds and streams.

A favorite diversion, especially for Sundays, was to watch the locusts come out of the shell. Generally one had to get up very early for such watching. Locusts are cycle insects, which spend their early years—three, five, seven, or seventeen—underground. Because the mother locust instinctively chooses to lay her eggs in the pith of dying twigs the insect has the ill name of stinging trees to death. The twigs, cast down by winter winds, take the eggs to earth. When they hatch, the tiny insects wriggle instantly out of sight. They feed upon fine, tender rootlets, change the skin now and again, and at last become big, horny-shelled bugs, which naturalists call nymphs. Sooner or later, upon some fine, moist night, the nymph digs its way out, making a deep, round hole, half an inch across. Above ground it keeps on going up—up a post, or tree trunk, or even a house wall. Presently it stops, sinks in its

hooked feet firmly, and waits for the drying shell to crack. It cracks up and down the back. Slowly, almost imperceptibly, the crack opens, revealing within a new creature, dark and wet. The head comes out first, the eyes shedding their horn coverings as though they were out-worn spectacles. Fore legs follow the head. When they have got a good purchase upon the horny shell, a surge brings out the wings, damp, and in tight, lumpy clots. Another pair of legs follows, then the pointed tip of the body comes in view, and, last of all, the strong hind legs.

Once out, the insect keeps quite still, growing almost visibly. The nymph may measure over all an inch and a quarter. The fledged locust is twice as long and three times as thick as the abandoned shell. A fine, iridescent down shakes out all over the body. The unfolding wings, stretched with infinite care, quiver throughout as air is forced into their veins to expand and stiffen them. Eyes, disproportionately big at first, grow bigger still; antennæ unfold. Three hours from the cracking of the shell a perfect locust sails away, to sip dew, honey, and the spilled juice of ripe fruit, and to sing stridulously the while the arid chant of midsummer.

Joe loved the locust song, if the locusts did end by spoiling the fishing. No fish worth catching would bite at any sort of bait when he had all the locusts he could eat simply for the swallowing. Sometimes, before many locusts fell into the pools, Joe caught a big fish by putting a locust delicately upon his hook and dancing it back and forth over the face of deep, still water. Old man Shack said: "Sech feeshin' wus er clean dare ter Providence. Locusses wus knowed ter be p'ison, an' besides, nigh kin ter witches, ever sence they wus sent in the Bible ter eat outen house an' home them thar fellers that wouldn't let the childern of Isrul go. That wus how come it they could kill trees jest a-stingin' of 'em; as fer fruit, hit warn't never safe ter eat none er plumb locus' year." The black people believed the old man about the fruit, but Joe and Patsy ate all that ripened, yet were never the worse for it.

They were mightily interested also in some members of the scarab family—the big black beetles, for instance, which they called "Betty bugs," hard and glossy as charcoal, with little rough stripes all over the shells. The Betties flew in through open windows the minute the lights were lit, sailed around, bumped against the walls or ceiling, and came croppers upon the floor. Generally they landed upon their backs, and lay kicking stupidly until Patsy swept them upon the shovel, and tossed them as far as she could into outer darkness. Some of them were three inches long, and so broad they plopped down like clods. They had fine brown gauze wings, spreading far beyond the cupped black shell. Patsy thought the shells must be as clumsy as was the armor of knights in the old days. She always ran to see a struggling Betty folding the wings and tucking them into place. Sometimes she righted the bug and watched intently, in hope it would spread the wings under her eye and sail away. Instead, the Betties scuttled for cover as fast as their strong legs could carry them.

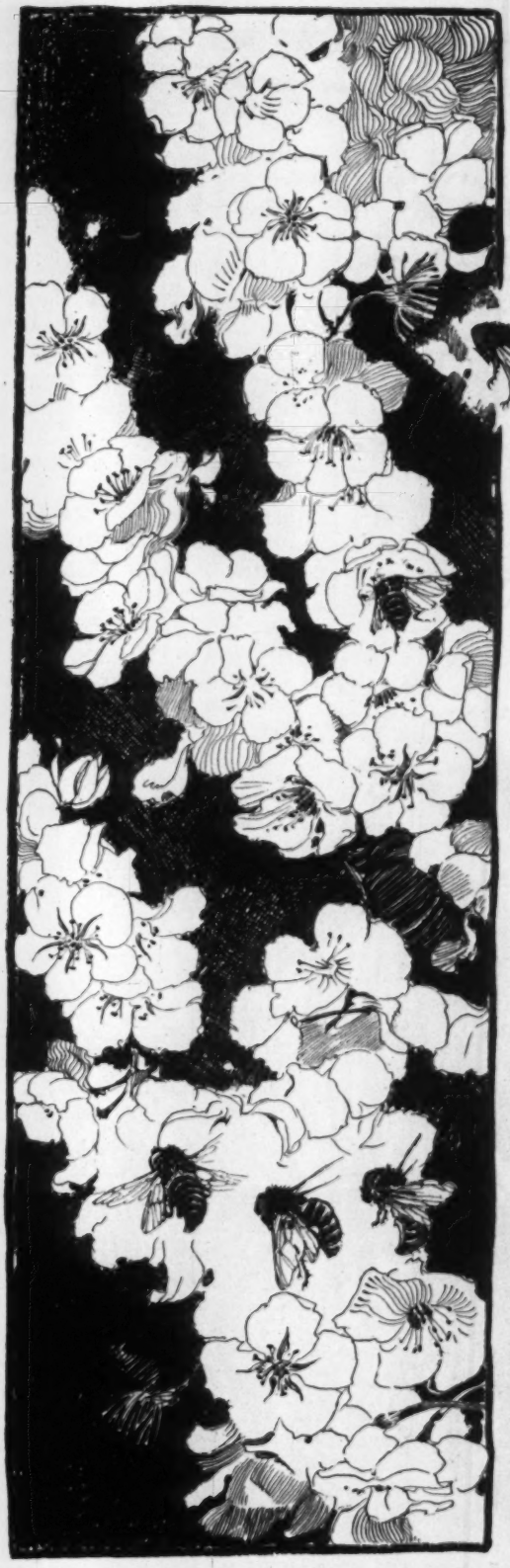
Sometimes the fall really stunned them, but oftener they feigned death, like their poor relations the tumble-bugs. One had but to touch one of them, rolling his malodorous ball ever so lightly, to have him keel over motionless. Then one might turn him upon his back, watch, and see him, five minutes later, turn right side up, and either begin rolling his ball again, or spread his wings and fly. He too wore his wings snug inside a cupped coat. There was an egg in each of the balls he rolled about. When he got it where he chose, he dug a hole with his round flat spade of a head, settled the ball in the bottom, then filled in the loose dirt and flew away. After the beetle fashion, he had a turtle-shaped shell, divided across where the waist might be thought to lie, and the lower half split up the middle lengthwise, and hinged to the fixed upper half. The hinges, of course, were to lift and let the wings out. At first the coat was a dull black. After a while it grew greenish gold upon the fixed upper half. A little later it was green all over, with the finest copper-yellow tint upon legs and throat and the whole under part. Then the tumble-bug was transfigured into a June bug, to haunt the gardens and cornfields in myriads, and buzz like mad. Black children caught the June bugs, tied a string to their hind legs, then let them fly the string's length, to hear the buzzing when the bugs found themselves imprisoned. The children called it "June-in'." They also called the bugs "June-y bugs." Even in this apotheosis, the insects are malodorous, but that the black children did not mind. They tied and loosed them in dozens, running about with the whole cluster flying above their heads, and shouting as they ran:

"June-y bug! June-y bug! Fly 'way wid me!"

Neither Joe nor Patsy ever touched the June bugs, though Billy-Boy's nurse let him "June" one at the end of a very long string. The bugs had a way of bunching themselves, six or seven together, upon the under side of corn blades, and staying motionless for hours. Yet they did not seem to mind sunlight, often flying right out into it, if they flew at all. Thus they were unlike most of the corn's insect haunters. Moths abound there. One of them, a strict night flier, gave Joe and Patsy heaps of occupation. It was as big as a humming-bird, with blackish-gray wings, two on each side; a hollow, honey-sucking beak as long as your little finger; prominent eyes; a thick, black, velvety body, and two rows of gorgeous orange spots down either side. The children called it a tobacco fly, and waged war on it with might and main.

The war was singular in that there was reason, even a color of justice, back of it. Tobacco worms are so much the pest of tobacco fields, if once they get beyond control, in a week they can bring the whole year's crop to naught. They are hatched from little clear white eggs, which the tobacco fly lays numerously on top of the broad leaves. At first the worms are no bigger than a cambric needle. Notwithstanding, they quickly manage to eat a passageway through the leaf, and shelter themselves from the sun upon its under side. At a day old they have perhaps made a hole the size of your little finger tip. At a week old they are as big as the finger itself, and quite ca-

THE HAUNT OF THE SNAKE-DOCTOR.



pable of devouring a whole leaf in twenty-four hours. Now, since a tobacco plant has but eight leaves, or ten at the most, and may have from two to one hundred worms upon those leaves, it becomes evident that here is a struggle—with the chances favoring the survival of the unfittest, that is to say, the worms.

Worms are what make eternal vigilance the price of fine tobacco. Sometimes a field is hail-beaten out of commercial quality, the leaves bruised and riddled until it looks to be badly worm-eaten. "Green hail" is thus a cant name for worms, specially applicable if they are slothfully permitted to ruin a promising field.

The worms have sharp horns at the tail, hence are also called horn worms. They are green, with lighter green markings along the back, round heads full of strong teeth, and many legless feet. If disturbed in their feeding after they are well grown, they raise the head, grit the teeth audibly, and eject a big drop of acrid brownish fluid, the juice of the green tobacco. They come in "gluts"—that is, in special numbers. The first glut, hatched early in July, is from eggs laid by flies that were worms the previous year. The worms went deep in the ground just after frost, changed themselves to blackish-gray shiny cocoons, and lay dormant until the spring sun was hot enough to hatch them under the earth blanket.

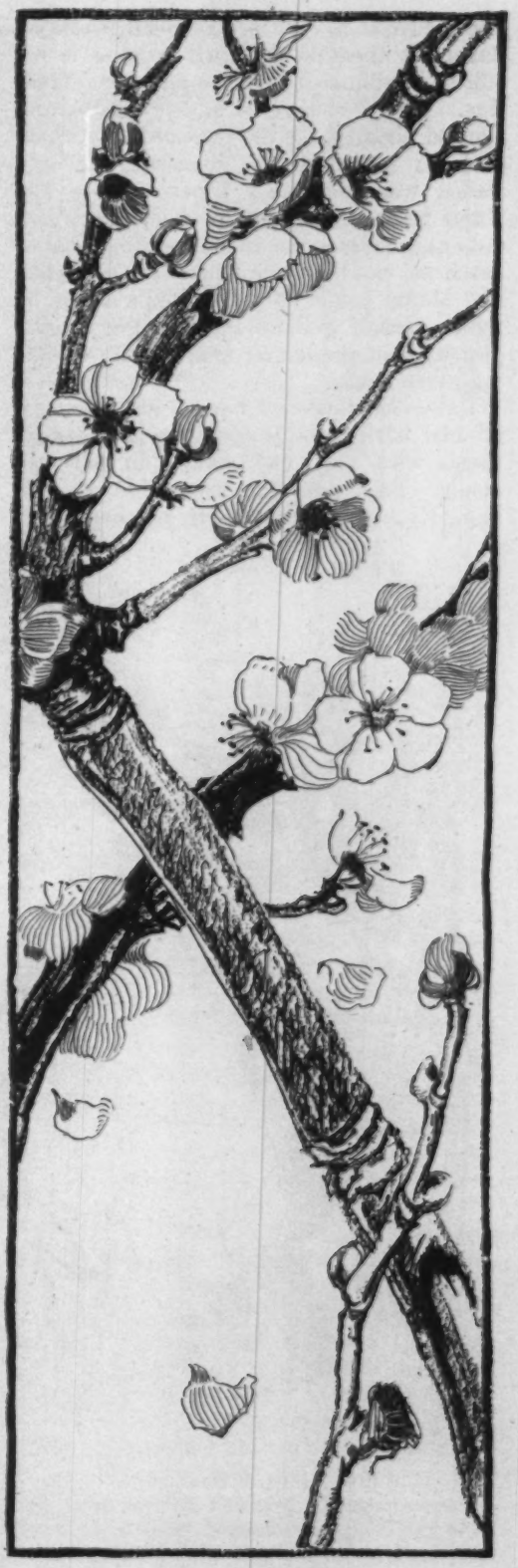
Since the destruction of a pair of flies means the prevention of 500 worms, Major Baker set a price on fly-heads, and paid it cheerfully. Further, he helped all he could in the work of destruction. Tobacco flies feed daintily upon dew and honey. The early hatch haunt the flower borders and honeysuckle trellises all through June, hovering momently to rifle roses and lilies, but in the end returning to the long-throated blossoms, whose sweets the bees could not reach. Joe and Patsy also haunted the flowers of evenings. The flies came out after sundown, and the children grabbed at them until it was pitch dark, or long after if the moon shone. They pulled off and strung the

fly heads, and there was sharp rivalry as to which should show the most. They got double price for these early heads, since each of them meant many thousand fewer worms in the dreadful "August glut." Eggs for the August glut are laid by flies hatched from June or July worms. The full moon of August is the really trying time. Flies are plentiest then, also most active, and forsake the garden blossoms for those of field and waste.

To destroy these fine summer-hatched legions was the end of jimson-weed planting. Books make it Jamestown weed, or *datura stramonium*, but the farmlands know it only as jimson weed. The weeds were planted along the turn rows, also in convenient clumps about the fields. They must have felt the world a bit upside down at finding themselves, the weediest of weeds, neither plucked up nor hewn down, but tended and coaxed to full blowth with the very nicest care. The first long, white, frill-edged trumpets came out on them when they were no more than knee high; but towards the last they grew taller than one's head, and correspondingly branchy. Every flower they opened was poisoned at sunset. Joe and Patsy tramped about,

armed with long-necked, quill-stoppered bottles full of cobalt mixed in honey, and shook drops of it deep in the flower hearts. Next morning they came again to snip off the poisoned blossoms; if left to wither on the stock the poison ran down the stalk and killed the plant. With half a dozen blooms to the weed it was no great task; but when the blooming was fairly on, and fifty opened upon each plant, it was something considerable. Since it is so considerable, a wildly inventive genius has sprung upon tobacco-growing communities an imitation jimson bloom of staring white glass, which can be tied to a stick, and poisoned once for always; but the planters rarely insult the intelligence of their enemies with a makeshift so crude.

A cent each for dead flies is no great price, but what with doubling on the early ones, between snatching and poison, Joe and

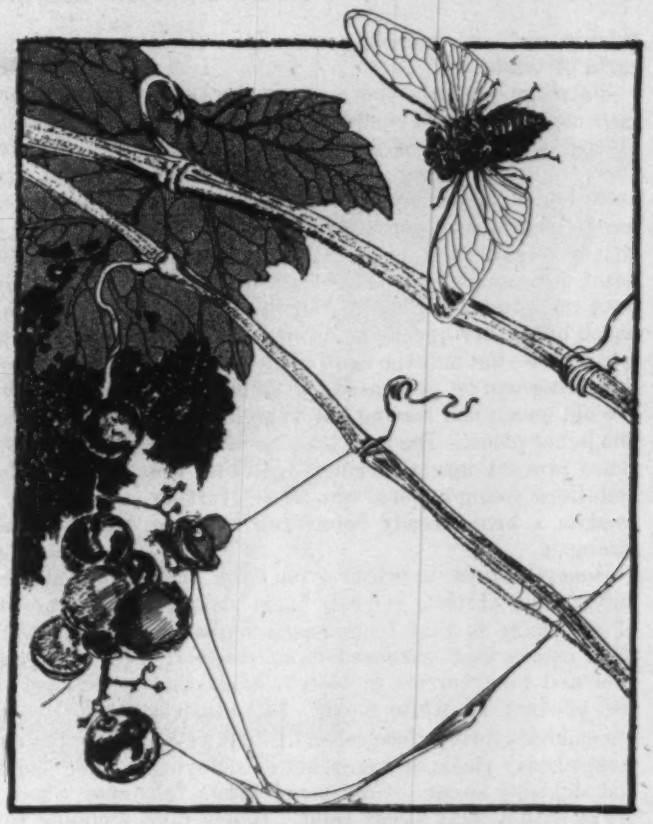


Patsy turned a very pretty penny. Major Baker let them do the work because it required intelligence and the strictest attention. He never haggled in settlements, and allowed liberally for the poisoned flies which died too far off to be counted. He only smiled when old man Shack said: "The Major he wus jest a-baitin' them thar p'ison inseckses ter come in droves ter the terbaker patch an' eat the crap plumb ter the stalk." The Major could afford to smile when he found himself getting through the August glut without the bother and expense of hiring extra hands.

Unless the poisoned blooms had been cut off and buried, the bees might have got at them, with very bad results in poisoned honey. Bees can suck poison almost with impunity. They secrete both wax and honey from the sweets they suck, as a cow secretes milk from grass and grain. Throughout the summer, bees feed largely upon pollen mixed with a very little honey. The mixture is the "bee-bread" with which the brood-comb of a hive is filled.

A swarm has but one mother—the queen, who lays all the eggs. The drone fathers do no work, creeping listlessly about and feeding on stored honey until after the eggs are laid. Then the working bees, all rudimentary females, fall upon the drones, sting them to death, and drag them outside the hive. Thus it appears that the little busy bee is not a pattern of filial excellence any more than of several other virtues with which she is mistakenly accredited—industry, for example. Bees in tropic climates, where flowers bloom all year long, get out

WHEN THE BEES SWARM.



of the way of laying up honey, even honey enough for the young bees. The same thing happens if they can find a weaker hive to plunder. Plundering is, indeed, so universal an instinct, and so well recognized among bees, that every swarm has a few guards whose business it is to watch the hive, and sting to death at once any stray bee that creeps into it.

Bees also lose industry in the time of cider making, if that process lasts longer than a day. They hum and buzz around the mills or the trough, swarm over the pomace, and end by getting gloriously drunk as the cider gets hard. They will cluster thick along the edge of an open bucket, sucking, sucking, until sometimes, when they try to fly away, they either tumble helplessly to the ground, or describe zig-zag summersaults extremely diverting. They will also feed supinely upon shallow pans of sugar and water set conveniently near, though richly flowered fields and woods may invite.

Still, they are active and fine workers, if they must be. In early spring, when the plum blossoms swell, the first flowers are not open before the bees begin to haunt them. It is the same with the peach trees. There the bees show discrimination. Unrifled, a peach blossom has a drop of clear honey at the heart almost as rich as any the bees themselves secrete. To secure so great a prize the bees crawl laboriously up and down the stalks, and over and around each swelling bud, seeking to thrust a head within the richly incurved petals as soon as they begin to unroll. Often the honey gatherer succeeds, and sucks the drop himself, hidden by the pale pink petals. Peach bloom is singular in that it does not fade, but deepens as it falls. Fresh blossoms are little more than flesh pink and shed petals richly crimson.

A swarm is a strict monarchy, though it is questionable if the queen mother is not rigorously held by constitutional limitations. It appears that bee royalty is wholly a matter of nurture. The workers prepare special cells, a little larger than the rest, for rearing young queens, and, after the egg is laid, fill the cells with royal jelly in place of ordinary bee-bread. After she is done flying out, sporting with the drones, the queen rarely ventures out of hive bounds. It happens sometimes, though, that her subjects rise up and slay her, or that in some other way she is destroyed. Then, if there are young queens hatching, the hive stands still, waiting for them to come out and settle the succession between themselves. But if the queen should be taken away before filling the royal cells, the workers enlarge ordinary cells, take out the bee-bread, put in royal jelly, and get queens quite up to standard as a result.

It is the queen bee, young or old, who leads out a new swarm. If several queens hatch simultaneously, there is an interval of chaos in the hive, much crawling back and forth, humming, buzzing, and stinging. At such times bees are most difficult of approach. By and by affairs seem to adjust themselves occultly. A swarm goes off, the queen settles in place, and the workers in mass take the superfluous queens and kill them, then drag them outside the hive. Bees are neater than wax in their housekeeping. They permit no spilled honey to remain, neither any chips of any sort. They mass themselves

thickly, and with fluttering wings fan out all sorts of trash.

Since the queen is the mother, stocks of bees can be changed completely in two years by the introduction of new queens. Italian bees are said to sting much less and make more honey, hence are high in favor. Bees have the curious property of parthenogenesis; that is to say, the females will lay eggs and hatch out young even if there happens to have been no drone in the hive. But they will not hatch out either queens or drones—the perfect sexes—but only the neuter working bees. Swarming can be prevented by taking away the old queen and leaving but a single young one in her place. The bees themselves sometimes prevent late swarming by killing the ambitious young queens, who would further weaken a hive already below full working strength.

Honey betrays its origin even more than milk. The whitest, richest, finest flavored of all honey is that from peach blossoms. Next comes that garnered from raspberry vine and blackberries in bloom; after that the product of white clover, with linden-bloom honey a very close second. Buckwheat makes heavy yields of honey, but it is cloying and sickishly sweet. Golden-rod taints fall honey with a faint weedy taint. Honey ravaged from ripe plums or grapes is fine and flavorous, though not very light. The trouble with such bee pasturage is that it goes to the head and makes the bees for the time too convivially inclined to think of real work.

New swarms are finicky as to where they will settle. Sometimes they go inside a hive, stay there a week, and begin working blithely, then all at once are up and off. Rubbing a hive inside with peach-tree leaves, or smoking it lightly with sulphur, is thought to make a new swarm better contented. In flying, a swarm looks like a brown cloud, no bigger than a man's hand, careering, or more properly rolling, just above the tree tops. At first swarming bees settle in thick clumps upon anything handy, the queen in the middle, the others massed all over her. Sometimes the mass droops in a long blunt pendant almost like an icicle. If the swarm comes out after midday, it is likely to settle close to the hive and stay quiet until morning. If it has settled upon anything detachable, as a tree branch, or projecting board, bee-keepers spread a white sheet down underneath, place a clean hive in the middle of the sheet, then saw off the bough or the board and lower it gently. If the bees cannot be thus detached, they are sprinkled and swept off, taking care not to anger them. After a little those upon the outer edge begin crawling along the sheet and go inside the hive. They may come back in a minute. Commonly there are three hours of running to and fro. If at last they stay inside, the hive is left standing until night. But the bees may go in with every sign of satisfaction, then all at once swarm out again and whip away before anybody knows it.

Wild bees are not native, but strays from civilization. In the old days, it is said, the wild swarms kept twenty miles in advance of the pioneers. The Indians said, when they heard them humming about, "Here come the little white men!" A wild swarm undisturbed, with plenty of pasture, will stay for fifty years in the same place, filling every crack and cranny of it with honey and brood-comb. A dry cave, or an unused garret or belfry, suits them to a nicety.

Bee superstitions are innumerable. Old man Shack had at least twenty without stopping to recollect. For instance, it was seven kinds of bad luck to buy or sell bees, excellent good luck to steal them, and lightning luck—that is, the most unexpected strokes of it—to have a stray swarm settle on your place with nobody ringing bells at them, or throwing up clods of dirt. Further, bees would be sullen, sting, work laggardly, and in the end run away if you did not specially tell them when anybody died or was born. Neither would they thrive if you forgot to give them a special Easter good-morrow—good-morning wouldn't do in the least.

The people at White Oaks disputed none of this. They were kindly wise enough to understand that the old man's beliefs were too ingrained to be controvertible by mere reason. Besides, they had all the large tolerance of the fields, which teach, as nothing else can do, that there are more things than have ever been mapped and bounded, or brought to book in the widest or the narrowest philosophies.

THE OKAPI.

Drawn by Sir Harry H. Johnston from Mr. Rowland Ward's building up of the animal in the British Museum.

THE OKAPI.

THE NEWLY-DISCOVERED BEAST LIVING IN CENTRAL AFRICA.

By Sir Harry H. Johnston, K.C.B.,

Special Commissioner for Uganda, British East Africa; the discoverer of the Okapi.

THE author of this article remembers having encountered in his childhood—say, in the later 'sixties—a book about strange beasts in Central Africa which was said to be based on information derived from early Dutch and Portuguese works. The publication of this book was more or less incited at the time by Du Chaillu's discoveries of the gorilla and other strange creatures on the west coast of Africa, and its purport was to show that there were in all probability other wonderful things yet to be discovered in the Central African forests. Among these suggested wonders was a recurrence of the myth of the unicorn. Passages from the works of the aforesaid Dutch and Portuguese writers were quoted to show that a strange, horse-like animal of striking markings in black and white existed in the very depths of these equatorial forests. The accounts agreed in saying that the body of the animal was horse-like, but details as to its horn or horns were very vague. The compiler of this book, however, believed that these stories pointed to the existence of a horned horse in Central Africa.

Somehow these stories—which may have had a slight substratum of truth—lingered in the writer's memory, and were revived at the time Stanley published his account of the Emin Pasha expedition, "In Darkest Africa." A note in the appendix of this book states that the Congo dwarfs knew an animal of ass-like appearance which existed in their forests, and

which they caught in pitfalls. The occurrence of anything like a horse or ass—animals so partial to treeless, grassy plains—in the depths of the mightiest forest of the world seemed to me so strange that I determined to make further inquiries on the subject whenever fate should lead me in the direction of the great Congo forest. Fate was very kind to me in the matter. In the first place, soon after I arrived in Uganda, I was obliged to intervene to prevent a too-enterprising German carrying off by force a troop of Congo dwarfs to perform at the Paris Exhibition. These little men had been kidnapped on Congo Free State territory. The Belgian authorities very properly objected, and as the German impressario had fled with his dwarfs to British territory, they asked me to rescue the little men from his clutches and send them back to their homes. This I did, and in so doing; and in leading them back to the forests where they dwelt, I obtained much information from them on the subject of the horse-like animal which they called the "Okapi."* They described this creature as being like a zebra, but having the upper part of its body a dark brown. The feet, however, they said, had more than one hoof.

When I reached Belgian territory, on the west side of the Semliki River, I renewed my inquiries. The Belgian officers at once said they knew the Okapi perfectly well, having frequently seen its dead body brought in by natives for eating. They informed me that the natives were very fond of wearing the more gaudy portions of its skin; and calling forward several of their native militia, they made the men show me all the bandoliers, waist-belts, and other parts of their equipment made out of the striped skin of the Okapi. They described the animal as a creature of the horse tribe, but with large, ass-like ears, a slender muzzle, and more than one hoof. For a time I thought I was on the track of the three-toed horse, the Hipparion. Provided with guides, I entered the awful depths of the Congo forest with my expedition, accompanied also by Mr. Doggett, the naturalist attached to my staff. For several days we searched for the Okapi, but in vain. We were shown its supposed tracks by the natives, but as these were footprints of a cloven-hoofed animal, while we expected to see the spoor of a horse, we believed the natives to be deceiving us, and to be merely leading us after some forest eland. The atmosphere of the forest was almost unbreathable with its Turkish-bath heat, its reeking moisture, and its powerful smell of decaying, rotting vegetation. We seemed, in fact, to be transported back to Miocene times, to an age and a climate scarcely suitable for the modern type of real humanity. Severe attacks of fever prostrated not only the Europeans, but all the black men of the party, and we were obliged to give up the search and return to the grass-lands with such fragments of the skin as I had been able to purchase from the natives. Seeing my disappointment, the Belgian officers very kindly promised to use their best efforts to procure me a perfect skin of the Okapi.

Some months afterwards, the promise was kept by Mr. Karl Eriksson, a Swedish officer in the service of the Congo Free State, who obtained from a native soldier the body of a recently-killed Okapi. He had the skin removed with much care, and sent it to me accompanied by the skull of the dead animal, and a smaller skull which he had obtained separately. The skin and skulls were forwarded to London, where they arrived after considerable delay. The British Museum entrusted the setting up of the Okapi to Mr. Rowland Ward of Piccadilly, and from the mounted skin and other data I have made the drawings which illustrate this article. I also give a photograph, taken by myself, of a bit of forest where the Okapi was found. Before sending this skin to Europe, and while it still retained some indications of the shape of the animal, I made the colored drawing which appears as the frontispiece to this issue of McClure's Magazine, and which will also be given in the "Proceedings of the London Zoölogical Society." This colored drawing differs in some particulars from the appearance of the Okapi as set up by Mr. Rowland Ward, and as represented in the illustrations of the present article. Until the Okapi has been photographed alive or dead, and its exact shape in the flesh is thus known, it is difficult to say which of my two drawings is the more correct. In the first illustration, which appears as the frontispiece, I have given the creature a more horse-like build. In the sketch which accompanies this article, and which is in the main drawn from Mr. Rowland Ward's building up of the animal from the flat skin, the shape of the body inclines a little more to the giraffe, the Okapi's nearest ally.

* As a matter of fact, the dwarfs pronounced the word "O'api," but the big black tribes of the forest called the creature "Okapi."

The size of the Okapi is that of a large stag. It stands relatively higher in the legs than any member of the ox tribe; otherwise I should compare its size to that of an ox. Like the giraffe, this creature has only two hoofs, and no remains whatever of the other digits, which are represented in the deer, oxen, and in most antelopes by the two little "false hoofs" on either side of the third and fourth toes.

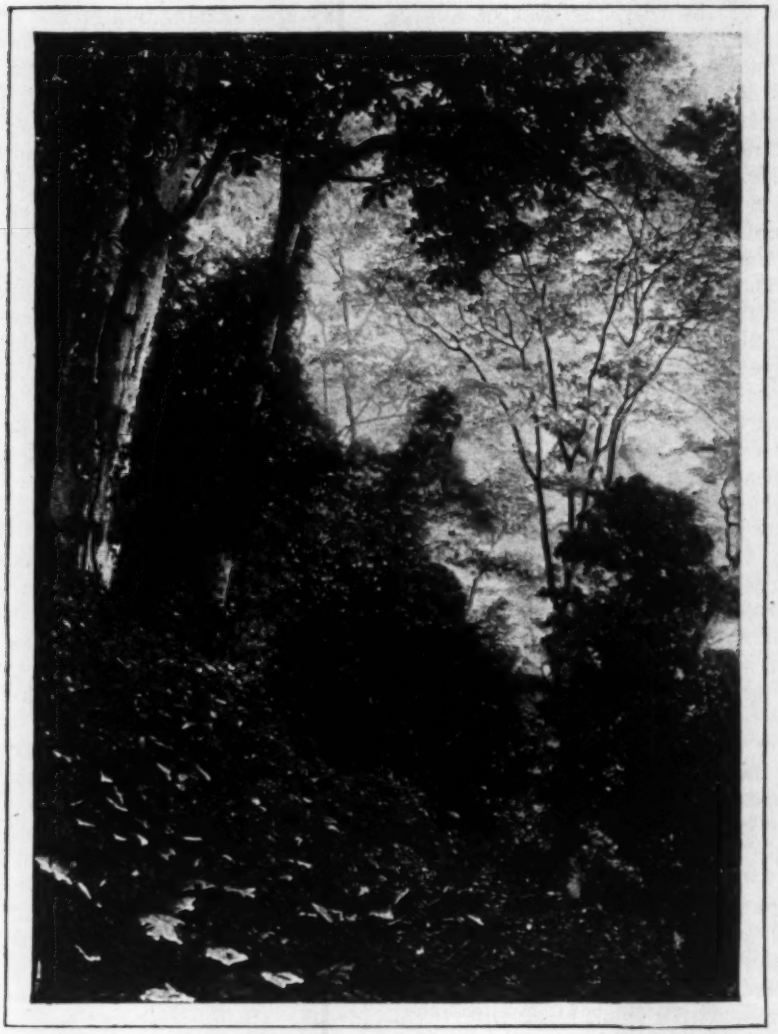
The coloration of the Okapi is quite extraordinary. The cheeks and jaws are yellowish white, contrasting abruptly with the dark-colored neck. The forehead is a deep red chestnut; the large broad ears are of the same tint, fringed, however, with jet black. The forehead ranges between vinous red and black in tint, and a black line follows the bridge of the nose down to the nostrils. The muzzle is sepia colored, but there is a faint rim or mustache of reddish-yellow hair round the upper lip. The neck, shoulders, barrel, and back range in tone from sepia and jet black to rich vinous red. The belly is blackish, except just under the knees. The tail is bright chestnut red, with a small black tuft. The hind quarters, hind and fore legs are either snowy white or pale cream color, touched here and there with orange. They are boldly marked, however, with purple-black stripes and splodges, which give that zebra-like appearance to the limbs of the Okapi that caused the first imperfect account of it to indicate the discovery of a new striped horse. The soft parts of the animal being as yet unknown, it cannot be stated positively that the Okapi possesses a prehensile tongue like the giraffe, but the long and flexible lips would seem to atone for the very weak front teeth. It is probably by the lips and tongue that the creature gathers the leaves on which it feeds, for according to the accounts of the natives it lives entirely on foliage and small twigs. Like all living ruminants (except the camel), it has no front teeth in the upper jaw. The molars are very like those of the giraffe.

HEAD OF THE OKAPI.
Drawn by Sir Harry H. Johnston.

My first examination of the skull and skin of the Okapi caused me to name it tentatively "Helladotherium." The Helladotherium was a giraffe-like animal that existed in the Tertiary Epoch in Greece, Asia Minor, and India. In India the Helladotherium attained a very great size, but the Greek specimens were not quite as large as the modern giraffe. The Helladotherium was hornless, like the Okapi, and in another point it resembled this animal, because the neck was not disproportionately long, and the fore and hind limbs were nearly equal in length. The Okapi bears on its skull remains of three horn-cores, once no doubt as prominent as those in the existing giraffes. The process of degeneration, however, has set in, and in the living Okapi the horn-cores have been worn down to two small knobs on the forehead, covered outwardly with little twists of hair, and one less conspicuous knob or bump just between the eyes. Though the Okapi bears certain superficial resemblances to the Helladotherium, it is probable, on the whole, that it comes nearest in relationship to the giraffe. Being, however, sufficiently different from both, it has been constituted by Professor Ray Lankester a separate genus, to which he has given the name *Ocapia*.

So far as is yet known, the existing range of the Okapi is confined to the northern part of the Congo forest, near the Semliki River. The Okapi is found in the little territory of Mboga, which is an outlying portion of the Uganda Protectorate. It is also found in the adjoining territory of the Congo Free State. This same forest, I believe, conceals other wonders besides the Okapi, not yet brought to light, including enormous gorillas. I have seen photographs of these huge apes, taken from dead animals which have been killed by the natives and brought in to the Belgians. A careful search might reveal several other strange additions to the world's mammalian fauna.

Quite recently fossil remains of giraffe-like animals have been found in Lower Egypt,



THE HOME OF THE OKAPI, SEMLIKI FOREST, EASTERN CONGO FREE STATE.

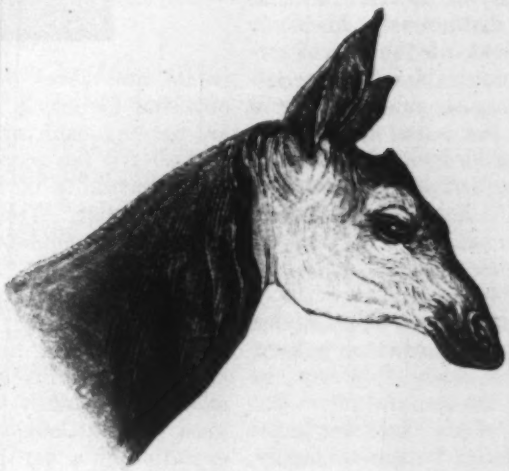
From a photograph taken by Sir Harry H. Johnston.

as well as in Arabia, India, Greece, Asia Minor, and Southern Europe. It is possible that the Okapi and the giraffe are the last two surviving forms of this group in tropical Africa. The giraffe has escaped extermination at the hands of carnivorous animals by its development of enormous size and by its wary habits. The giraffe, unlike the Okapi, prefers relatively open country, dotted with the low acacia trees on which it feeds. Towering up above these trees, the giraffe with its large eyes can from twenty feet above the ground scan the surrounding country, and detect the approach of a troop of lions, the only creature besides man which can do it any harm. Man, of course—the British and Boer sportsmen well in advance of the others—is doing his level best to exterminate the giraffe, as he has exterminated the mammoth, the Ur ox, the quagga, the dodo, and the auk. But for the presence of man, the giraffe might have been one of the lords of the earth. The defenseless Okapi, however, only survived by slinking into the densest parts of the Congo forest, where the lion never penetrates, and where the leopard takes to a tree life and lives on monkeys. The only human enemies of the Okapi hitherto have been the Congo dwarfs and a few black negroes of the larger types who dwell on the fringe of the Congo forest. How much longer the Okapi will survive now that the natives possess guns, and collectors are on the search for this extraordinary animal, it is impossible to say. It is to be hoped very earnestly that both the British

and Belgian governments will combine to save the Okapi from extinction.

The group of ruminants to which the *Ocapia* belongs includes at the present day the giraffe and possibly the prongbuck of North America. Far back in the history of the Artiodactyla,* when in a section of them horns became the dominant characteristic, these appendages were developed mainly in two different fashions. The deer tribe grew bony appendages which started from knobs on the frontal bones, and these appendages fell off and were renewed every twelve months. When the horns of the stag fall, they leave only a bony knob, which rises very little above the level of the skull. The *Bovidæ*, or oxen-antelope group, developed first long bony prominences which went on growing year by year up to the age of full maturity. These bony prominences came in time to be cased by horny coverings, and thus we have the hollow-horned ruminants; for when these horny coverings are removed from the long bony socket they are found to be hollow; they are not solid bony antlers growing from the top of a horn-core. But midway between these two main groups there is a third, of which the giraffe and the prongbuck are two divergent specimens. Here was an intermediate stage between the deer and the oxen. Bony prominences, like those of the *Bovidæ*, but not so long, grew out from the skull and were covered with hair. From the top of these prominences (as in the case of the prongbuck, the extinct Sivatherium, and probably in the ancestors of the giraffe) grew antlers or horns which were shed from time to time, as in the deer. This is the case with the modern prongbuck, and in all probability this was the case with the ancestors of the giraffe and other early members of the giraffine family. To-day the giraffe only retains the long horn-cores or sockets, from the end of which in all probability antlers once sprang. In the case of the Okapi, as already remarked, these bony prominences have gradually dwindled to scarcely discernible bumps. In other respects, however, the new beast of Central Africa represents pretty nearly the primitive type from which the giraffe rose in exaggerated development of neck and limbs.

* Most of the readers of McClure's Magazine are aware that the Artiodactyla are a sub-order of ungulates in which the middle toes are equally developed. This group includes the hippopotamus, the pigs, camels, deer, giraffes, oxen, sheep, goats, and antelopes.



NOTABLE BOOKS AND AUTHORS.

NOTES ABOUT SOME OF OUR EARLY FALL PUBLICATIONS.

A New Novel by Anthony Hope.

Anthony Hope Hawkins

FROM no imaginary kingdom does Mr. Anthony Hope draw for his new novel, "Tristram of Blent." He goes into the very heart of modern, commercial England, yet his pen never fails to touch the prosaic characters of this story of to-day with that subtle romanticism distinctively his own. Harry Tristram of Blent, at the age of sixteen, learns that, through the difference between Russian and English calendars, he is not the real heir to the name and estates heretofore regarded as his by birth and heritage. In that hour is born a grim, cunning man who determines to hold his inheritance at any cost. Then again does fate in the form of a beautiful girl, the rightful heiress of Tristram, pick up the tangled threads of his life and alter its weave. Voluntarily, if impulsively, he yields up that which is hers, and, installing her as Lady Tristram, he starts out to carve his own future. The gradual development of his character in the new rôle of a man without name or family, and his ultimate triumph in fortune and love, work out to the entire satisfaction of the reader. The story's humor is refreshingly delicate, its character studies are keen and natural, and the action is so dramatic, so whimsical, as to please the most captious seeker for the unusual.

By Bread Alone.

"By Bread Alone" is Mr. I. K. Friedman's significant title for a new novel whose setting is at the very heart of modern life. It takes us amid the looming, Doré-like scenes of a great steel foundry, and into the new palace of the steel baron; it makes us share the life of the poverty-stricken, half-dazed Poles who work for him, and engulfs us in their blind struggles to save themselves when their master drives them to the wall; it pictures a strike with a vividness that makes the pages an experience, pictures it not from one but from twenty stand-

points, and moves our feelings in behalf of opposing forces, in sympathy for men who are fighting each other to the death. Impartiality is the secret of the book's power, the impartiality of the far-seeing, comprehending artist. This is no tract from a doctrinaire, it champions no recipe for universal happiness, sets forth no iron-bound conclusions; it is a story, and a love story, and it is in men and women, above all in one man and one woman, that the heart of its interest lies. But Mr. Friedman feels the throb of modern life, and it thrills him; he does not need the battlefields of the past for the evolution of a hero; he finds the industrial conflicts of our time as full of human interest as any that were ever fought. Blair Carrhart goes as a laborer into the steel works, that he may better know the men whom he wants to help. His sweetheart is the daughter of his employer. With him we live a life full of dangers and struggles and

suffering, and with him we learn the hopelessness of any easy remedies for wrong. Not "by bread alone" can he save the people he has made his own, any more than Marvin, the capitalist, can in bread alone find his account. The story "ends well," as people say, but in no impossible Utopia. Mr. Friedman is an artist, not a preacher; but here he has given, as only the artist can, food for thought to every student of the industrial revolution that thinkers know is already upon us.

The Best 250 Books.

With a view to an official recommendation to the libraries of the State, the Book Board of the New York State Library prepared a list of the "best 250 books" published during 1900—that is to say, about four per cent. of the total of 6,000. This list was printed in the "New York Times Saturday Review" of July 27th.

In a list made with such discrimination as this necessarily was, we were gratified to find *ten* of our own books included—one of them being the only book in its class—this in spite of the fact that our book department has been barely a year in existence.

The following of our publications were included:

SOCIOLOGY.

THE TRUST PROBLEM, by Professor J. W. Jenks.

EDUCATION.

THE SCHOOL AND SOCIETY, by John Dewey.

FOLK-LORE.

DONEGAL FAIRY STORIES, by Seumas MacManus (the only book in this classification).

DESCRIPTION AND TRAVEL.

THE AWAKENING OF THE EAST, by Pierre Leroy-Beaulieu.

THE GREAT BOER WAR, by Dr. A. Conan Doyle.

AMERICAN HISTORY.

AMERICAN FIGHTS AND FIGHTERS, by Cyrus Townsend Brady.

BIOGRAPHY.

LIFE OF ABRAHAM LINCOLN, by Ida M. Tarbell.

FICTION.

THE SOUL OF THE STREET, by Norman Duncan.

MONSIEUR BEAUCAIRE, by Booth Tarkington.

JUVENILE FICTION.

YANKEE ENCHANTMENTS, by Charles Battell Loomis.

Mr. White's First Novel.

Stewart Edward White is a name that has very recently begun to appear in the best magazines; but though Mr. White is a new comer, his short stories have already attracted attention by their freshness and ability, and also by their singular versatility. They range from an Indian camp to a Paris studio, and their quiet, somewhat unconscious mastery of local color is equally convincing in either field. Mr. White makes his first appearance as a novelist in "The Westerners," and it will considerably more than fulfill the expectations his short stories have aroused. It shows a power to handle a big canvas such as can never be predicated from the successful short story. Here, too, is not only a big canvas, but one crowded with varying, contrasting figures and with events that have an epic's significance. Mr. White knows the West as only a native can know it, and at the same time he knows it as can only one who looks at it from without. He knows the world and has seen the West, the West of the American frontier which is passing so rapidly away, in superb perspective; he feels its place in the world's story, and he understands it down to the last intricacy of the diamond hitch or to the most secret history of cattle brands. With Indians he shows a sounder acquaintance, less warped by winds of doctrine, than any American has displayed in fifty years.

Stewart Edward White

In "The Westerners" we meet not one or two phases of life, but many; we travel the plains with emigrants; fight Indians and fight with Indians; see Molly Lafond make

friends with the men at the bar of the Little Nugget, and watch her contest with Bismarck Anne with an attention strained by both the comedy and the tragedy of its primitive grotesquerie. The story of Billy Knapp's triumphant departure from the mine he had ruined is alone "worth the price of admission"; and the end of the villain Lafond in the Indian camp closes the book with a note of austere tragedy that enforces the power of this whole epic of the West.

Wall Street Stories.

Edwin Lefèvre

Edwin Lefèvre, whose "Wall Street Stories" will be published by us this month, is thirty years of age. His father is an English-American of Huguenot ancestry, and his mother a Colombian of Spanish descent. He lived in South America and California until he was fourteen, and later studied mining engineering at Lehigh University. He taught school in Georgia for a while, and then came North to engage in newspaper work, and for a number of years has been one of the financial editors of the New York "Commercial Advertiser."

His intimacy with the business of the Stock Exchange and with its most active members has enabled him to brilliantly work a vein in fiction heretofore scarcely suspected. Mr. Lefèvre is equipped with an admirable instinct for a story—for those traits of narrative which are always essential to a good tale, whether it be about Esquimaux or brokers; and his acquaintance with the most complicated battlefield in the world enables him to effectually exploit its wonderful, stirring human dramas.

Pastorals of Ireland's Peasantry.

"Irish Pastorals," by Mr. Shan F. Bullock, to be issued in September, is a collection of character sketches of the soil—of the Irish soil—by one who has lived long and closely among the laboring, farming peasantry of Ireland. It is not, however, a dreary recital of long days of toil with scanty food and no recreation, but it depicts within a life more strenuous than one can easily realize, abundant elements of keen native wit and irrepressible good nature. The book will give many American readers a new conception of Irish pastoral life, and a fuller appreciation of the conditions which go to form the strength and gentleness of the Irish character.

Irving Prompt Book.

Last season we published Mr. Richard Mansfield's acting version of "King Henry V.," and Mr. E. H. Sothern's acting version of "Hamlet." We have now in press "Coriolanus," as revised for his own production by Sir Henry Irving. The book will contain the newest portraits of Miss Terry and Sir Henry in character, as they will produce it in this country next month.

Mosquitoes.

Professor L. O. Howard, in his "Mosquitoes," doubtless hoped to claim the attention only of scientists and others interested in the extirpation of the mosquito scourge. He may have "builded better than he knew" when such a discriminating critic as Mr. Julian Hawthorne writes of the book:

"For the insurance of peace and comfort it is worth all the systems of philosophy published during the last fifty years; and for pleasurable exhilaration I would back it against a hundred thousand modern novels taken at random."